

INTERIM DATA SUMMARY REPORT GROUNDWATER

PCB INVESTIGATION AT SITE 1 - FORMER DRUM MARSHALLING AREA

Naval Weapons Industrial Reserve Plant
Bethpage, New York



**Naval Facilities Engineering Command
Mid-Atlantic**

CONTRACT NUMBER N62470-08-D-1001
Contract Task Order WE44

September 2012



TETRA TECH

**INTERIM
DATA SUMMARY REPORT
GROUNDWATER**

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FORMER DRUM MARSHALLING AREA**

**NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
BETHPAGE, NEW YORK**

**Submitted to:
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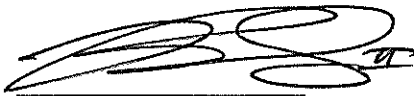
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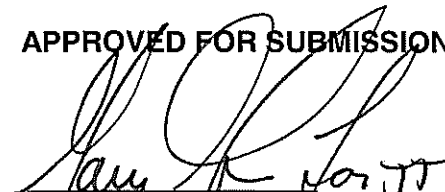
September 2012

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ACRONYMS

AOC	Area of Concern
AST	Aboveground Storage Tank
bgs	below ground surface
CLEAN	Comprehensive Long-Term Environmental Action Navy
CTO	Contract Task Order
ER	Environmental Restoration
FS	Feasibility Study
ft/day	feet per day
GOCO	Government-Owned Contractor-Operated
gpm	gallons per minute
HNUS	Halliburton NUS
HSA	Hollow Stem Auger
IDW	Investigation-Derived Waste
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
MS/MSD	matrix spike/matrix spike duplicate
NAVFAC	Naval Facilities Engineering Command Mid-Atlantic
NGC	Northrop Grumman Corporation
NTU	Nephelometric Turbidity Unit
NWIRP	Naval Weapons Industrial Reserve Plant
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ORP	Oxygen Reduction Potential
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethene
PVC	Polyvinyl chloride
QA	Quality Assurance
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
TOC	Total Organic Carbon
TCE	Trichloroethene
UFP	Uniform Federal Policy
VOC	Volatile organic compound
µg/L	microgram per liter

1.0 INTRODUCTION

This Data Summary Report was prepared by Tetra Tech, Inc. for the Naval Facilities Engineering Command (NAVFAC) - Mid-Atlantic under the U.S. Navy's Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract number N62470-08-D-1001, Contract Task Order (CTO) WE44. The Data Summary Report presents the field activities at Site 1 – Former Drum Marshalling Area conducted from April 2011 through January 2012 at the Naval Weapons Industrial Reserve Plant (NWIRP) located in Bethpage, New York (Figures 1-1 and 1-2). The field activities consisted of the following: surface water sampling, soil borings, down hole geophysical logging, monitoring well installation and development, and groundwater sampling. Procedures, methods, and rationale were presented in the Uniform Federal Policy (UFP) Sampling and Analysis Plan (SAP) (Tetra Tech, 2010a) and the subsequent SAP Addendum (Tetra Tech, 2011). Groundwater investigation activities were conducted in accordance with the Navy Environmental Restoration (ER) Program and New York State Department of Environmental Conservation (NYSDEC) Resource Conservation and Recovery Act (RCRA) permit number NYD003995198.

1.1 SCOPE AND OBJECTIVES

This document summarizes the groundwater investigation activities conducted at the NWIRP Bethpage Site 1 – Former Drum Marshalling Area between April 2011 and January 2012. The primary objectives of the investigation were to further define the extent of polychlorinated biphenyls (PCBs) and hexavalent chromium detected in groundwater and investigate potential upgradient source areas (former sludge drying beds and NWIRP recharge basins).

Before this investigation, the existing groundwater monitoring well network at Site 1 consisted of twenty monitoring wells extending from 20 feet north to 250 feet south of the Site 1 boundaries. Groundwater flow is generally to the south across the Site. Sampling of these monitoring wells in November 2010 and March 2011 indicated concentrations of PCBs near or above New York State Department of Health (NYSDOH) maximum contaminant levels (MCLs) and hexavalent chromium detections were reported in some monitoring wells. Additional shallow, intermediate, and deep monitoring wells were installed from October through December 2011 upgradient and downgradient of Site 1 to better define the extent of PCB impacted groundwater. Total chromium and hexavalent chromium sampling was also added to the analytical suite for all monitoring wells after some detections were observed in select monitoring wells during the March 2011 groundwater sampling event.

A description of the field activities is presented in Section 3.0 of this report. The field work conducted from April 2011 to January 2012 is summarized as follows:

- Collected surface water samples from two former NWIRP recharge basins
- Advanced five deep soil borings with split spoons collected at select intervals
- Gamma logging from the deep borings for lithology
- Installed and developed fifteen new monitoring wells
- Sampled thirty-four monitoring wells for VOCs, in January 2012
- Surveyed the fifteen newly installed monitoring wells

1.2 REPORT ORGANIZATION

This Data Summary Report provides general implementation information and the approach used in conducting the groundwater investigation activities from April 2011 to January 2012 at Site 1. The report consists of five sections. Section 1.0 provides an introduction. Section 2.0 provides the facility background and environmental setting. Section 3.0 provides a summary of the field activities. Section 4.0 presents the findings and analytical results, and Section 5.0 presents the conclusion and recommendations.

2.0 BACKGROUND

2.1 SITE DESCRIPTION

The Navy's Bethpage facility is located in east-central Nassau County, Long Island, New York, approximately 30 miles east of New York City (Figure 1-1). Established in 1943, the property known as NWIRP Bethpage was originally situated on 109 acres entirely within the Northrop Grumman Aerospace complex. NWIRP Bethpage was a Government-Owned Contractor Operated (GOCO) facility that was operated by the Northrop Grumman Corporation (NGC) until September 1998. Since 1998, the Navy transferred 100 acres to Nassau County. The remaining 9-acre parcel is being retained by the Navy for environmental investigations and remediation. Other than environmental investigation and cleanup work, there are no operations conducted on the Navy's property that generate hazardous waste.

Site 1 - Former Drum Marshalling Area is located in the eastern portion of the Navy's 9-acre parcel. Site 1 is mostly an open area, which in the past included above ground storage tanks (Areas of Concern [AOC] 23), a sanitary settling tank, and sludge drying beds (AOC 35). All these structures were located in the northern portion of the site, as well as a few scattered metal storage buildings. In general this area is relatively flat except for a 4-foot vegetated windrow located along the eastern end of the site, and a mounded area which partially buries the abandoned sanitary settling tank. The site is enclosed by a site perimeter fence along the north, west and south, with an eastern facility perimeter fence bounding the site from a residential neighborhood to the east. Figure 2-1 provides a site layout and aerial view of Site 1.

Site 1 originally consisted of two former drum marshalling pads located in the center of the site that were used to store drums containing waste materials from operations at Plant No. 3 and potentially other wastes from operations at the facility. Transformers and a PCB-filled autoclave were also stored at the site. Underlying most of Site 1 is approximately 120 abandoned cesspools that were designed to discharge sanitary waste waters from Plant No. 3. These cesspools were approximately 10 feet in diameter and 16 feet deep. Based on field observations, the cesspools are currently filled with soil. It is possible that non-sanitary wastes may have been discharged into this system. The drum marshalling areas and extent of the leach field were the original extent of Site 1.

In addition to the original extent of Site 1, due to proximity, similar contamination, and potential need for remedial actions, AOC 23, AOC 35, and dry-wells 20-08 and 34-07 were subsequently included as a part of Site 1.

2.2 ENVIRONMENTAL SETTING

2.2.1 Topography and Drainage

NWIRP Bethpage is located in an area underlain by permeable glacial deposits and characterized by limited surface water drainage features. Normal precipitation at the facility is expected to infiltrate rapidly into the soil. NWIRP recharge basins, which receive storm water runoff, are located in the northeastern portion of the facility north of Site 1. NWIRP Bethpage occupies a relatively flat, intermorainal area, and has very little topographic relief.

2.2.2 Geology and Soils

NWIRP Bethpage is underlain by approximately 1,100 feet of unconsolidated sediments that overlie crystalline bedrock (Isbister, 1966). The unconsolidated sediments consist of four distinct geologic units: (in descending order) Upper Glacial Formation, Magothy Formation, Raritan Clay, and Lloyd Sand Formation. The 30- to 45-foot-thick Upper Glacial Formation consists chiefly of coarse sands and gravels. The Upper Magothy Formation consists primarily of coarse sands to a depth of approximately 100 feet, below which finer sands and silts predominate along with some clay layers. These clay layers are common but laterally discontinuous; no individual clay horizon of regional extent has been observed in the Upper Magothy Formation. The 100- to 150-foot-thick Raritan Clay underlies the Magothy Formation at a depth of approximately 700 to 800 feet below ground surface (bgs). The underlying Lloyd Sand Formation is approximately 300 feet thick.

2.2.3 Hydrogeology

Most of Long Island is bisected by an east-west-trending regional groundwater divide. NWIRP Bethpage occupies an area of recharge, lying to the south of the divide. Groundwater is in contact with the Upper Glacial and Upper Magothy Formations beneath the facility, and may be considered a common unconfined aquifer. The glacial deposits are characterized by a high primary porosity (exceeding 30 percent) and high permeability. The high permeability of the glacial deposits allows for the rapid recharge of precipitation to the underlying Magothy (Isbister, 1966; McClymonds and Franke, 1972). The number and thickness of clay lenses increase with depth in the Magothy Formation; however, the horizontally discontinuous nature of these units prevents any one of them from functioning as a competent aquitard or confining unit.

Groundwater beneath the Site flows in a general southerly direction toward the Atlantic Ocean. Across the facility, the horizontal hydraulic gradient and groundwater velocity in the unconfined common aquifer

averages 5.3 feet per mile and 0.3 foot per day (ft/day), respectively [Halliburton NUS (HNUS), 1993]. Subtle vertical hydraulic gradients occur in a downward direction. Groundwater in the deeper portion of the Magothy is the primary source of potable water in Nassau County. Groundwater is encountered at a depth of approximately 50 feet bgs at the facility. Historically, because of pumping and recharge at the facility, groundwater has been measured from depths ranging from 40 to 60 feet bgs.

Prior to 1998, the groundwater flow dynamics beneath the NWIRP and Grumman were complex. A total of 16 deep production wells (7 on the NWIRP and 9 on Grumman property) existed which were set in the Magothy and each yielded approximately 1,200 gallons per minute (gpm). All of the production wells on the Navy's property have been abandoned. The extracted water was mostly used for non-contact single pass cooling and then discharged into recharge basins located on Navy and Northrop Grumman property. Based on extraction and recharge rates and well locations, groundwater on the Navy property flowed predominately west and southwest. In addition, the production wells extracted groundwater from depths of approximately 500 feet bgs and the water was recharged in the basins near grade. The extraction from the production wells and near surface recharge resulted in vertical gradients at the Site. Grumman continues to operate production wells (as well as a groundwater containment system) south of NWIRP Bethpage. The production wells and groundwater containment system operates with a combined flow rate of approximately 3,800 gpm.

The Magothy aquifer is highly conductive. For example, in the 1995 Feasibility Study (FS) investigation's pumping test no. 2, the pumping of production well PW-11 located on the Navy's property at nearly 1,000 gpm for 72 hours produced little or no measurable drawdown in the nearby observation wells or other production wells.

3.0 FIELD INVESTIGATION

3.1 FIELD AND SAMPLING ACTIVITIES

This additional PCB field investigation was conducted to address the following objectives (Interim Data Summary Report and SAP Addendum, Tetra Tech, 2011):

- Further delineate the extent of PCB and hexavalent chromium contamination in groundwater
- Investigate potential upgradient source areas (former sludge drying beds and NWIRP recharge basins)

The field sampling activities included the sampling of surface water, advancement of soil borings, permanent monitoring well installation, monitoring well development, sampling of new and existing monitoring wells, and surveying. These activities were conducted to meet the project objectives presented above and determine a path forward for further investigation and support future remedial evaluations.

The following subsections summarize the field investigation activities and identify the sampling locations and type of samples that were collected during the investigation.

3.1.1 Surface Water Sampling

On October 19, 2011 two surface water samples were collected from the outfalls into the southwestern (BPS1-SW3001) and northeastern (BPS1-SW3002) former NWIRP recharge basins. Approximately 1.2 inches of precipitation was recorded the three days prior to sampling. The outfall into the southwestern basin mainly receives storm water runoff from Plant #3 and the northeast basin receives storm water runoff from Aerospace Boulevard and northern portions of the former NWIRP property. The northeast basin also receives discharge water from the Northrup Grumman IRM system which is located just east of this basin. The surface water samples were analyzed for volatile organic compounds (VOCs), PCBs, total chromium, and hexavalent chromium. Figure 3-1 depicts the location of the two surface water samples. The samples were collected at the concrete outfalls and filled directly with storm water runoff.

3.1.2 Soil Borings

In October and November 2011, five deep soil borings were advanced using mud rotary and hollow stem auger (HSA) drilling methods at each monitoring well cluster location. The soil boring locations (BPS1-TT-MW305, -MW306, -MW307, -MW307, -MW308, and -MW309) are presented on Figure 3-1 and the

boring logs and gamma logs are presented in Appendix A. At each location an 8-inch surface casing was installed to approximately 25 feet bgs. Soil cuttings generated during drilling were screened with a photoionization detector and lithologically logged. Split spoon samples were collected at select intervals to confirm lithology. Gamma logging was conducted at each soil boring and was interpreted to confirm the presence of fine grained lithology (i.e., clay) down to 300 feet bgs. BPS1-TT-MW307 was the only location which did not exhibit a substantial gamma ray spike around 300 feet bgs which is indicative of a silt or clay unit and the boring was advanced to a total depth of 435 feet bgs. Only a varying predominate sandy lithology was encountered at depth. The soil boring at BPS1-TT-MW307 was thus discontinued.

All soil cuttings were containerized and treated as Investigation Derived Waste (IDW). After waste characterization was complete, the soils were transported and disposed of off-site at an approved disposal facility by the IDW subcontractor.

3.1.3 Monitoring Well Installation

Five monitoring well clusters, consisting of three monitoring wells, were installed via mud rotary and/or HSA drilling methods from October through December 2011. Each monitoring well cluster consisted of a shallow water table well, an intermediate well, and a deep well. Shallow monitoring well screen intervals ranged from 40 to 65 feet bgs in depth, intermediate wells from 150 to 200 feet, and deeper wells from 250 to 300 feet. Two monitoring well clusters (BPS1-TT-MW308 and -MW309) were installed in the hydraulically upgradient (north) of Site 1 and three monitoring well clusters (BPS1-TT-MW305, -MW306, and -MW307) were installed hydraulically downgradient (south) of Site 1. The upgradient clusters were installed to investigate the potential upgradient sources of the former sludge beds and NWIRP recharge basins to the north. The former sludge drying beds are hydraulically upgradient of Site 1 and are located approximately 550 feet north of the BPS1-TT-MW301 cluster. The three downgradient well clusters were installed approximately 400 feet south of three existing downgradient monitoring well clusters (BPS1-TT-MW302, -MW303, and -MW304). The monitoring well locations are presented on Figure 3-1 and the construction details are provided in Table 3-1.

At each monitoring well cluster, the deep monitoring wells were installed in the deep soil borings using mud rotary drilling methods, while the shallow and intermediate monitoring wells were installed via HSA drilling. Before the deep monitoring wells were installed the drilling mud within the soil boring was thinned and if the soil boring was deeper than needed, it was backfilled with #1 silica sand to the appropriate depth for well installation. For the shallow and intermediate monitoring wells the augers were advanced to the target depths (determined from gamma logs and split spoon sampling) and filled with potable water to limit flowing sands. Each monitoring well was constructed with a 2-inch diameter, 10-foot, 0.010-inch slot, schedule 40 polyvinyl chloride (PVC) screen and riser pipe. A #1 silica sand pack was installed from

1 foot below to a minimum of 3 feet above the screened interval, except for the deep wells where the sand pack extended approximately 10 feet above the screen. The deep wells were constructed without a bentonite seal and with a thicker sand pack due to the difficulty of setting a bentonite seal through the drilling mud. For the shallow and intermediate monitoring wells a 3- to 5-foot bentonite seal consisting of coated bentonite pellets was placed above the sand pack and allowed to hydrate prior to grouting. High solids bentonite-cement grout slurry was then pumped via tremie pipe up to the ground surface. Protective steel stick-up casings were installed at the BPS1-TT-MW306, -MW308, and -MW309 monitoring well clusters. Flush mount well covers were installed at the BPS1-TT-MW305 and -MW307 monitoring well clusters, while the wells at BPS1-TT-MW301 were converted from stick-ups to flush mounts due to potential high traffic in this area from commercial redevelopment activities.

Well development was conducted using both airlifting and submersible pump development methods. The well development of the intermediate and deep monitoring wells consisted of airlifting followed by surging/purging with a submersible pump (Grundfos). Development of the shallow monitoring wells was only possible by surging/purging with a submersible pump (Grundfos). During well development, groundwater parameters were measured every 5 minutes and included: pH, specific conductivity, temperature, turbidity, and oxygen reduction potential (ORP). Development was concluded after parameter stabilization was achieved and approximately 400 gallons of water was purged from each shallow monitoring well and a minimum of 550 gallons was purged at each intermediate/deep monitoring well. Monitoring well construction and development records are presented in Appendix A. Development water was containerized and treated as IDW.

3.1.4 Groundwater Flow and Sampling

Groundwater sampling was conducted from January 10 through January 23, 2012 using low flow sampling techniques. A Grundfos Rediflo pump was used for groundwater purging and sample collection activities. Groundwater parameters and turbidity measurements were collected at each monitoring well during purging and allowed to stabilize before sampling. Each monitoring well was field tested for hexavalent chromium and groundwater samples were also collected for VOC, PCB, and metal analysis by a fixed based lab. At well locations where test kit results indicated a positive detection of hexavalent chromium greater than 0.01 milligrams per liter (mg/L) a sample was collected for analysis by fixed based lab to confirm the result. Groundwater sample log sheets and low flow purge data sheets are presented in Appendix A.

The hexavalent chromium field test kit followed HACH Method 8023 (1,5-Diphenylcarbohydrazide Method) using a HACH DR/890 colorimeter and associated ChromaVer 3 Chromium Reagent Powder Pillows. At the start of each day a 0.5 mg/L Hexavalent Chromium standard solution was prepared to

check and confirm calibration of the colorimeter. During testing two vials were filled with groundwater, one of which was the blank and the other was the sample in which the ChromaVer 3 Chromium Reagent Powder Pillow was added. If the groundwater was turbid (>50 Nephelometric Turbidity Units [NTUs]) an Acid Reagent Powder Pillow was added to the blank sample. After 5 minutes the blank sample vial was then run to zero out the colorimeter which was followed by the sample vial with the reagent, to provide the final result.

Quality Assurance (QA) samples were taken during groundwater sampling and included rinsate blanks, source water blanks, field duplicates, matrix spike matrix duplicated (MSMSD), and trip blanks. QA sample log sheets are presented in Appendix A.

Purge water generated during monitoring well sampling was containerized and treated as IDW.

On January 24, 2012 a round of synoptic groundwater measurements were collected. These measurements were used to generate groundwater elevation contour maps and provide information on groundwater flow patterns and gradients (see Appendix A for Groundwater Level Measurement Sheets). Figure 3-2, 3-3, and 3-4 present the January 2012 potentiometric surface for shallow, intermediate, and deep monitoring wells, respectively. Based on the groundwater levels, a slight downward vertical gradient is observed between shallow and deeper monitoring wells and a south to southeast groundwater flow is apparent at Site 1. Table 3-2 provides a summary of the groundwater elevations at Site 1.

3.1.5 Surveying

The newly installed monitoring wells and area surveys around the monitoring wells were surveyed by BANC3, a New York State licensed surveyor, on January 26, 2012. Each location was surveyed for horizontal position and vertical components including both ground surface and top of casing elevations for each monitoring well location. Horizontal measurements were accurate to 0.1 foot while vertical elevation measurements were accurate to 0.01 foot at each location. The area surveys consisted of four horizontal survey points bounding the monitoring wells not on Navy property for future easement agreements. A summary of the survey results can be found in Appendix B.

4.0 FINDINGS AND ANALYTICAL RESULTS

4.1 INTRODUCTION

Results from this additional PCB field investigation consisted of geologic observations, hydrogeological findings, and field test kit and fixed-based laboratory analytical results of groundwater and surface water samples. The following subsections describe the findings and analytical results.

4.2 GEOLOGY AND HYDROGEOLOGY

The geology encountered in the study area was variable both horizontally and vertically. Medium to course sand and gravel was consistently observed in the upper 30 feet of each boring. Below 30 feet, fine grained silty sands predominate along with some clay and potential lignite layers that range in thickness from a few inches to approximately 10 feet thick.

A cross section location map (Figure 4-1) presents the cross sections generated to present the lithological interpretations across the study area. Figure 4-2 presents Cross Section A-A' which runs north to south through the study area. Figures 4-3 and 4-4 present Cross Sections B-B' and C-C' which run east to west, approximately 400 feet apart, with each cross section interpreted through three downgradient soil borings/monitoring well locations.

Lithologic data collected from soil cores, split spoon samples, and gamma logs were used to interpret the subsurface lithology presented on the cross sections. By comparing the lithologic data and gamma ray signatures from adjacent soil borings, most of the silt and clay layers above 150 feet bgs appear to be discontinuous. Below 150 feet bgs the gamma ray signatures of the clay and silt layers have enough similarities to connect some of these fine-grained units. Notable semi-confining units, approximately 10 feet thick, appear to be present from BPS1-TT-MW309D to BPS1-TT-SB3002 between 250 and 300 feet bgs and from BPS1-SB3007 and BPS1-TT-MW306D between 200 and 250 feet bgs, see Figures 4-2 and 4-3. Figure 4-4 presents the geology encountered at the southernmost extent of the study area. Between 150 and 200 feet bgs there appears to be a series of semi-confining units, below which the clay layers become more discontinuous and much thinner. These semi-confining units appear to impede PCB-contaminated groundwater from migrating deeper, but do not completely prevent PCB-contaminated groundwater from reaching depths deeper than 250 feet bgs.

The soil boring at BPS1-TT-MW307D was advanced to a depth of 435 feet bgs. Below 300 feet bgs no fine-grained layers were encountered and the predominant sandy formation coarsened with depth.

Based on the lithology observed in the new soil borings and the borings advanced in 2009 and 2010, monitoring wells were installed at depths just above potential semi-confining units observed in the soil borings and/or at depths where contamination was observed in upgradient wells. Table 3-1 presents the construction details for each of the monitoring wells installed during this investigation.

4.3 SURFACE WATER SAMPLE RESULTS

Two surface water samples were collected from the outfalls into the southwestern (BPS1-SW3001) and northeastern (BPS1-SW3002) former NWIRP recharge basins (Figure 3-1). Approximately 1.2 inches of precipitation was recorded the three days prior to sampling. The samples were collected at the concrete outfalls and filled directly with storm water runoff and sampled for VOCs, PCBs, total chromium, and hexavalent chromium. Table 4-1 provides a summary of the analytical results. Aroclor-1248 was detected at BPS1-SW3001 at 0.35 micrograms per liter ($\mu\text{g/L}$) and PCBs were not detected at BPS1-SW3002. Total chromium (2.4 and 0.84 $\mu\text{g/L}$) and hexavalent chromium (0.4 and 0.4 $\mu\text{g/L}$) were detected at BPS1-SW3001 and BPS1-SW3002 respectively. VOCs were not detected in either of the two surface water samples.

4.4 GROUNDWATER SAMPLING RESULTS

4.4.1 Groundwater Test Kit Results

Hexavalent chromium field test kits were used at each monitoring well during the January 2012 sampling event. Table 4-2 provides a summary of the field test kit results at each well location along with the corresponding fixed-based laboratory results for chromium and hexavalent chromium. The hexavalent chromium test kit results ranged from non-detect to 180 $\mu\text{g/L}$. Concentrations (>10 $\mu\text{g/L}$) of hexavalent chromium were observed at BPS1-TT-MW301D (90 $\mu\text{g/L}$), -MW304I1 (40 $\mu\text{g/L}$), -MW304I2 (180 $\mu\text{g/L}$), and -MW309I (60 $\mu\text{g/L}$). Further discussion on these results is provided in the following section.

4.4.2 Monitoring Well Sampling Results

During the January 2012 sampling event thirty-four monitoring wells were sampled and analyzed for VOCs, PCBs, and total chromium and iron by TriMatrix Laboratories of Grand Rapids, Michigan. Select monitoring wells were also sampled for TOC, hexavalent chromium, filtered chromium and iron, and total calcium and sodium. Table 4-3 provides a summary of the analytical results with the associated Federal and NYSDOH MCLs for each detected compound for comparison. Figures 4-5, 4-6, and 4-7 provide a summary of the distribution and concentrations of the detected compounds in the shallow, intermediate, and deep monitoring wells respectively.

Aroclor-1242 or Aroclor-1248 was detected by the laboratory in 30 of the 34 groundwater samples. The laboratory indicated that a conclusive PCB Aroclor identification was not possible due to the signature interference and/or weathering of the PCBs. Validation of the laboratory results indicated that both Aroclor-1242 and Aroclor-1248 have several common peaks and similar patterns in their standard chromatograms. Because of these similarities, it was difficult to determine the predominant Aroclor or how to precisely quantify each Aroclor separately. Therefore the laboratory reported a single Aroclor mixture, either Aroclor-1242 or Aroclor-1248. A “weathering effect” or degradation of compounds within the specific mixtures is also a likely factor in precisely identifying the Aroclor mixture present. Despite these complexities, validation concluded that an Aroclor mixture is present in the affected samples. Due to the uncertainties speciating Aroclor-1242 and Aroclor-1248, detected Aroclors will be treated as a single Aroclor and referenced in the following text as PCBs.

PCBs were detected in 30 of the 34 groundwater samples collected, with 22 of the samples indicating concentrations of PCBs exceeding the Federal and NYSDOH MCL of 0.5 µg/L during the January 2012 sampling event. Of the nine monitoring wells located upgradient of Site 1, PCBs were not detected in only one monitoring well (BPS1-TT-MW309D). Concentrations in five of these upgradient wells were above the MCL including the highest observed PCB detection of 10 µg/L at BPS1-TT-MW301S. All three monitoring wells on the downgradient edge of Site 1 (BPS1-FW01, FW02, FW03, and HN29I) showed detections of PCBs, but only one monitoring well (BPS1-FW-MW03 at 1.9 µg/L) exceeded the MCL. Of the 22 downgradient monitoring wells, 19 wells had detections of PCBs with 17 of these monitoring wells having concentrations exceeding the MCL. Four out of the twelve shallow monitoring wells across the study area indicated concentrations of PCBs exceeding the MCL. Sampling results from the intermediate and deep monitoring wells showed MCL exceedences of PCBs in 19 out of 22 samples.

A total of fourteen VOCs were detected in groundwater, with four VOCs (1,1,1-trichloroethane, cis-1,2-dichloroethene, tetrachloroethene [PCE], and trichloroethene [TCE]) exceeding the corresponding NYSDOH and/or Federal MCLs. 1,1,1-trichloroethane exceeded NYSDOH MCL of 5 µg/L at BPS1-FW-MW01 with a concentration of 8.3 µg/L. Cis-1,2-dichloroethene exceeded the NYSDOH MCL of 5 µg/L at two monitoring wells with concentrations ranging from 6 µg/L at BPS1-TT-MW304I1 to 70 µg/L at BPS1-FW-MW01. Six of the monitoring well samples indicated concentrations of PCE above the MCLs with detections ranging from 5.5 to 200 µg/L. The highest detection of PCE was observed at BPS1-FW-MW01. TCE exceeded the MCL of 5 µg/L at 4 monitoring wells (BPS1-FW-MW01, BPS1-TT-MW303I1, -MW305I, and -MW305D) with concentrations ranging from 18 to 3900 µg/L. The highest concentrations of TCE were observed at BPS1-TT-MW305I (3900 µg/L) and BPS1-TT-MW305D (140 µg/L).

Twelve groundwater samples were collected and analyzed for hexavalent chromium by the fixed-based laboratory. Hexavalent chromium was detected in six of the twelve groundwater samples and used to correlate and confirm detections observed in the field test kit sampling. Laboratory detections of hexavalent chromium were observed in monitoring wells BPS1-TT-MW301I (5.3 µg/L), BPS1-TT-MW301D (86 µg/L), BPS1-TT-MW304I1 (35.5 µg/L), BPS1-TT-MW304I2 (181 µg/L), BPS1-TT-MW309S (8.9 µg/L), and BPS1-TT-MW309I (47.7 µg/L). Total chromium was detected in all 34 groundwater samples and only exceeded the MCL of 100 µg/L at BPS1-TT-MW304I2 (200 µg/L).

Table 4-2 provides a comparison of the hexavalent chromium field test kits and laboratory results for hexavalent chromium and total chromium samples. Hexavalent chromium field test kit results showed good correlation with the fixed-based laboratory results for concentrations that exceeded the detection limit of 10 µg/L for the field test kits. This correlation is seen in the following detections of hexavalent chromium from the monitoring well samples as presented in Table 4-2: 90 µg/L and 86 µg/L at BPS1-TT-MW301D, 40 µg/L and 35.5 µg/L at BPS1-TT-MW304I1, 180 µg/L and 181 µg/L at BPS1-TT-MW304I2, and 60 µg/L and 47.7 µg/L at BPS1-TT-MW309I. When also comparing the total chromium results above 25 µg/L to the hexavalent chromium results (field test kit and fixed-based laboratory) at each well location, the concentrations also correlated well, indicating that if elevated concentrations of total chromium is detected in groundwater, most of it is likely in the hexavalent form.

Appendix C and D provide the chain of custody forms, analytical results, and validation summaries of the groundwater samples sent for fixed based lab analysis.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions based on the PCB investigation activities are as follows:

1. Under current conditions, potentiometric surface mapping of groundwater indicates groundwater flow is south to southeast across Site 1.
2. Detections of PCBs and Hexavalent Chromium in groundwater at upgradient monitoring well clusters BPS1-TT-MW301, -MW308, and -MW309 indicate a potential upgradient source that has contributed to PCB-contaminated groundwater north of Site 1.
3. TCE was detected at 3,900 µg/L in monitoring well BPS1-TT-MW305I (southwestern most well cluster along the southern fenceline).
4. Hexavalent chromium was detected at concentrations of 86 µg/L at BPS1-TT-MW301D, 35.5 µg/L at MW304I1, 181 µg/L at MW304I2, and 47.7 µg/L at MW309I.
5. A good correlation was observed between the hexavalent chromium field test kit results and the fixed-based laboratory for results above the test kit detection limit of 10 µg/L.

Recommendations are as follows:

1. Investigate potential upgradient sources of PCB- and hexavalent chromium- contaminated groundwater north of the NWIRP recharge basins and former sludge drying beds.
2. Further monitor the occurrence of PCBs, chromium and hexavalent chromium in groundwater to support future remedy evaluations to determine whether Site 1 is a statistically significant source of PCBs detected in groundwater.

Based on the results of the groundwater monitoring through January 2012, additional monitoring wells will be installed upgradient of Site 1 to evaluate potential upgradient sources of contamination. A SAP Addendum is presented in Appendix E and details the additional upgradient well installation and groundwater sampling to be conducted in 2012.

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TABLES

TABLE 3-1
MONITORING WELL CONSTRUCTION DETAILS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHAPGE, NEW YORK

Monitoring Well ID	Installation Date	Total Depth (feet bgs)	Screened Interval Depth (feet bgs)	Reference Elevation TOC (feet MSL)	Ground Surface Elevation (feet MSL)
BPS1-FW-MW01	NA	63.5 ¹	48.5-63.5 ¹	126.10	123.57
BPS1-FW-MW02	NA	64 ¹	49-64 ¹	126.85	124.23
BPS1-FW-MW03	NA	67 ¹	52-67 ¹	125.46	122.86
BPS1-HN-MW29I	11/26/1991	130.5	120-130	115.37	116.06
BPS1-TT-MW301S	11/10/2010	61	51-61	126	126.38
BPS1-TT-MW301I	11/12/2010	140	130-140	125.56	126.04
BPS1-TT-MW301D	10/29/2010	220	210-220	125.93	126.32
BPS1-TT-MW302S	10/30/2010	51	41-51	116.01	116.32
BPS1-TT-MW302I1	10/26/2010	120	110-120	115.91	116.32
BPS1-TT-MW302I2	10/18/2010	150	140-150	115.91	116.33
BPS1-TT-MW302D	10/16/2010	213	203-213	116.08	116.35
BPS1-TT-MW303S	8/18/2010	56	46-56	115.65	116.06
BPS1-TT-MW303I1	10/19/2010	105	95-105	115.83	116.08
BPS1-TT-MW303I2	10/17/2010	156	146-156	115.89	116.15
BPS1-TT-MW303D	10/14/2010	218	208-218	115.94	116.2
BPS1-TT-MW304S	11/13/2010	53	43-53	119.13	116.49
BPS1-TT-MW304I1	11/11/2010	112	102-112	119.27	116.77
BPS1-TT-MW304I2	11/1/2010	150	140-150	119.18	116.7
BPS1-TT-MW304D	10/27/2010	190	180-190	119.19	116.67
BPS1-TT-MW305S	11/22/2011	50	40-50	116.04	116.52
BPS1-TT-MW305I	11/29/2011	200	190-200	116.16	116.38
BPS1-TT-MW305D	11/21/2011	296	286-296	115.94	116.25
BPS1-TT-MW306S	12/8/2011	60	50-60	117.82	115.33
BPS1-TT-MW306I	12/6/2011	199	189-199	117.76	115.45
BPS1-TT-MW306D	11/28/2011	294	284-294	118.06	115.59
BPS1-TT-MW307S	11/11/2011	50.5	40.5-50.5	114.39	114.59
BPS1-TT-MW307I	11/18/2011	198	188-198	114.16	114.67
BPS1-TT-MW307D	11/11/2011	286	276-286	114.42	114.85
BPS1-TT-MW308S	11/14/2011	64	54-64	131.05	128.586
BPS1-TT-MW308I	11/15/2011	166	156-166	130.73	128.58
BPS1-TT-MW308D	10/31/2011	260	250-260	130.98	128.78
BPS1-TT-MW309S	11/9/2011	63	53-63	131.77	129.41
BPS1-TT-MW309I	11/8/2011	170	160-170	131.83	129.44
BPS1-TT-MW309D	10/20/2011	262	252-262	131.52	129.42
BPS1-RA-MW02	NA	68	58-68	122.15	122.51
BPS1-RA-MW04	NA	68	58-68	NA	NA

NOTES:

bgs = below ground surface

MW = Monitoring Well

MSL = Mean Sea Level

NA = Not Available

TOC = Top of Casing

¹ = Top of Casing Measurement

TABLE 3-2
GROUNDWATER ELEVATION SUMMARY
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK

Well	Total Depth (feet bgs)	Screened Interval Depth (feet bgs)	Ground Surface Elevation (feet MSL)	TOC Elevation (feet MSL)	Jan. 2012 Water Level (feet BTOC)	Jan. 2012 Water Level (feet MSL)
BPS1-FW-MW01	63.5	48.5-63.5 ¹	123.57	126.1	52.25	73.85
BPS1-FW-MW02	64	49-64 ¹	124.23	126.85	52.89	73.96
BPS1-FW-MW03	67	52-67 ¹	122.86	125.46	51.39	74.07
BPS1-HN-MW29I	130.5	120-130 ²	116.06	115.37	42.15	73.22
BPS1-HN-MW29D	220	210-220	116.07	115.5	42.33	73.17
BPS1-TT-MW301S	62	51-61	126.38	126.00	51.24	74.76
BPS1-TT-MW301I	140	130-140	126.04	125.56	51.08	74.48
BPS1-TT-MW301D	220	210-220	126.32	125.93	51.81	74.12
BPS1-TT-MW302S	51	41-51	116.32	116.01	42.38	73.63
BPS1-TT-MW302I1	120	110-120	116.32	115.91	42.43	73.48
BPS1-TT-MW302I2	150	140-150	116.33	115.91	42.69	73.22
BPS1-TT-MW302D	213	203-213	116.35	116.08	42.96	73.12
BPS1-TT-MW303S	58	46-56	116.06	115.65	42.13	73.52
BPS1-TT-MW303I1	105	95-105	116.08	115.83	42.5	73.33
BPS1-TT-MW303I2	156	146-156	116.15	115.89	42.84	73.05
BPS1-TT-MW303D	218	208-218	116.2	115.94	43.01	72.93
BPS1-TT-MW304S	53	43-53	116.49	119.13	46.03	73.10
BPS1-TT-MW304I1	112	102-112	116.77	119.27	46.26	73.01
BPS1-TT-MW304I2	150	140-150	116.7	119.18	46.45	72.73
BPS1-TT-MW304D	190	180-190	116.67	119.19	46.6	72.59
BPS1-TT-MW305S	50	40-50	116.52	116.04	42.96	73.08
BPS1-TT-MW305I	200	190-200	116.38	116.16	43.55	72.61
BPS1-TT-MW305D	296	286-296	116.25	115.94	43.78	72.16
BPS1-TT-MW306S	60	50-60	115.33	117.82	44.9	72.92
BPS1-TT-MW306I	199	189-199	115.45	117.76	45.34	72.42
BPS1-TT-MW306D	294	284-294	115.59	118.06	46.04	72.02
BPS1-TT-MW307S	50.5	40.5-50.5	114.59	114.39	41.81	72.58
BPS1-TT-MW307I	198	188-198	114.67	114.16	42.21	71.95
BPS1-TT-MW307D	286	276-286	114.85	114.42	42.66	71.76
BPS1-TT-MW308S	64	54-64	128.586	131.05	55.54	75.51
BPS1-TT-MW308I	166	156-166	128.58	130.73	55.7	75.03
BPS1-TT-MW308D	260	250-260	128.78	130.98	56.27	74.71
BPS1-TT-MW309S	63	53-63	129.41	131.77	55.82	75.95
BPS1-TT-MW309I	170	160-170	129.44	131.83	56.45	75.38
BPS1-TT-MW309D	262	252-262	129.42	131.52	56.39	75.13
BPS1-RA-MW02	68	58-68	--	122.47	47.79	74.68
BPS1-RA-MW04	68	58-68	--	--	--	--

Notes:

bgs : below ground surface

BTOC : Below top of casing

MSL : Mean sea level

Italics : Estimated value

TABLE 4-1
ANALYTICAL DETECTIONS - SURFACE WATER
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK
PAGE 1 OF 1

	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs ⁽²⁾	BPS1-SW3001	BPS1-SW3002
Sample Date				10/19/2011	10/19/2011
Polychlorinated Biphenyls (µg/L)					
AROCLOR-1248	12672-29-6	0.5	0.5	0.35 J	0.1 U
Metals (µg/L)					
CHROMIUM	7440-47-3	100	100	2.4	0.84 J
IRON	7439-89-6	NE	300	240	150
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³	0.4 J	0.4 J

Notes:

MCL = Maximum Contaminant Level

NYSDOH = New York State Department of Health

µg/L = micrograms per liter

U = Non Detect

J = Estimated Value

NE = Not Established

¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at

<http://www.epa.gov/safewater/contaminants/index.html#primary>

² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at

<http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm>

³ There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-2
FIELD TEST KIT AND LABORATORY CHROMIUM RESULTS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHAPGE, NEW YORK

Monitoring Well ID	Screened Interval Depth (feet bgs)	Hexavalent Chromium Test Kit ¹ Result (µg/L)	Hexavalent Chromium Lab Analytical Result (µg/L)	Total Chromium Lab Analytical Result (µg/L)
BPS1-FW-MW01	48.5-63.5	10	-	4.4
BPS1-FW-MW02	49-64	10	-	8.5
BPS1-FW-MW03	52-67	10	-	4.6
BPS1-HN-MW29I	120-130	10	-	5.5
BPS1-TT-MW301S	51-61	10	-	2.5
BPS1-TT-MW301I	130-140	10	5.3	7.0
BPS1-TT-MW301D	210-220	90	86	92
BPS1-TT-MW302S	41-51	10	-	0.63 J
BPS1-TT-MW302I1	110-120	ND	-	1.4
BPS1-TT-MW302I2	140-150	10	-	5.1
BPS1-TT-MW302D	203-213	ND	-	2.3
BPS1-TT-MW303S	46-56	10	-	2.7
BPS1-TT-MW303I1	95-105	ND ²	-	5.8
BPS1-TT-MW303I2	146-156	10	ND	2.4
BPS1-TT-MW303D	208-218	ND	-	5.3
BPS1-TT-MW304S	43-53	ND	-	1.4
BPS1-TT-MW304I1	102-112	40	35.5	38
BPS1-TT-MW304I2	140-150	180	181	200
BPS1-TT-MW304D	180-190	ND	-	4.5
BPS1-TT-MW305S	40-50	ND	-	2.4
BPS1-TT-MW305I	190-200	ND	-	3.5
BPS1-TT-MW305D	286-296	ND	ND	22
BPS1-TT-MW306S	50-60	10	ND	1.3
BPS1-TT-MW306I	189-199	ND	ND	2.3
BPS1-TT-MW306D	284-294	10	-	1.2
BPS1-TT-MW307S	40.5-50.5	ND	-	4.0
BPS1-TT-MW307I	188-198	ND	ND	12
BPS1-TT-MW307D	276-286	ND	-	13
BPS1-TT-MW308S	54-64	ND	-	10
BPS1-TT-MW308I	156-166	ND	-	10
BPS1-TT-MW308D	250-260	10	-	17
BPS1-TT-MW309S	53-63	10 ³	8.9 J	18
BPS1-TT-MW309I	160-170	60 ^{2,3}	47.7	49
BPS1-TT-MW309D	252-262	ND ³	ND	7.5

Notes:

µg/L = micrograms per liter

bgs = below ground surface

ND = Non Detect

J = Estimated Value

¹ Field test kits followed Hach Method 8023

² Acid pillow added to blank sample before running sample due to elevated turbidity

³ Test kit performed two weeks after lab sample collected

TABLE 4-3
ANALYTICAL DETECTIONS MONITORING WELLS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK
PAGE 1 OF 5

	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs ⁽²⁾	BPS1-FW-MW01- 01192012	BPS1-FW-MW02- 01172012	BPS1-FW-MW03- 01192012	BPS1-HN-MW29I- 01192012	BPS1-HN-MW29I- 01192012 DUPLICATE	BPS1-TT-MW301S- 01172012	BPS1-TT-MW301I- 01172012	BPS1-TT-MW301D- 01172012	BPS1-TT-MW301D- 01232012
Sample Date				1/19/2012	1/17/2012	1/19/2012	1/19/2012	1/19/2012	1/17/2012	1/17/2012	1/17/2012	1/23/2012
Sample Interval (feet bgs)				48.5-63.5	49-64	52-67	120-130	120-130	51-61	130-140	210-220	210-220
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	8.3	0.39 J	0.25 J	0.5 U	0.5 U	0.5 U	0.5 U	0.53 J	
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	1.2	0.36 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
1,1-DICHLOROETHANE	75-34-3	NE	5	3.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.22 J	
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	70	0.5 U	0.49 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.35 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
TETRACHLOROETHENE	127-18-4	5	5	200	21	68	0.49 J	0.46 J	0.5 U	0.5 U	0.26 J	
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 J	
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
TRICHLOROETHENE	79-01-6	5	5	21	2.7	3.7	0.5 U	0.5 U	0.5 U	0.5 U	2.6	
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.79	0.75 J	
AROCLOR-1248	12672-29-6	0.5	0.5	0.46	0.3	1.9	0.63	0.66	10	0.08 U	0.08 U	
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE				24000					
CHROMIUM	7440-47-3	100	100	4.4	8.5	4.6	5.5	5.2	2.5	7	92	
IRON	7439-89-6	NE	300	860	330	110	83	93	56	17 J	14 J	
SODIUM	82115-62-6	NE	NE				7800					
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³							5.3		86
Filtered Metals (µg/L)												
CHROMIUM	7440-47-3	100	100									
IRON	7439-89-6	NE	300									
Miscellaneous (µg/L)												
TOTAL ORGANIC CARBON		NE	NE									

Notes:
MCL = Maximum Contaminant Level
NYSDOH = New York State Department of Health
bgs = below ground surface
µg/L = micrograms per liter
U = Non Detect
J = Estimated Value
Blank cell = No sample
NE = Not Established
Bolded value indicates exceedance of Federal or NYSDOH MCLs
¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at <http://www.epa.gov/safewater/contaminants/index.html#primary>
² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at <http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm>
³ There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3
ANALYTICAL DETECTIONS MONITORING WELLS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK
PAGE 2 OF 5

	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs ⁽²⁾	BPS1-TT-MW302S- 01202012	BPS1-TT-MW302I1- 01202012	BPS1-TT-MW302I2- 01202012	BPS1-TT-MW302D- 01202012	BPS1-TT-MW303S- 01232012	BPS1-TT-MW303S- 01232012 DUPLICATE	BPS1-TT-MW303I1- 01192012	BPS1-TT-MW303I2- 01192012	BPS1-TT-MW303D- 01192012
Sample Date				1/20/2012	1/20/2012	1/20/2012	1/20/2012	1/23/2012	1/23/2012	1/19/2012	1/19/2012	1/19/2012
Sample Interval (feet bgs)				41-51	110-120	140-150	203-213	46-56	46-56	95-105	146-156	208-218
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	0.35 J	0.5 U	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	0.45 J	0.5 U	0.5 U	0.5 U	0.5 U	1.6	0.5 U	0.5 U
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.62 J	0.5 U	0.5 U	1.6	0.5 U	0.5 U
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.5 U	0.29 J	0.5 U	0.33 J	1.9	1.8	83	0.94 J	0.5 U
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.5 U	1.7	1.8	3.9	2.7	2.7	18	1.6	0.51 J
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	3.9	0.08 U	1.6
AROCLOR-1248	12672-29-6	0.5	0.5	0.43	1.2	1.9	0.85	0.21	0.2	0.08 U	2.4	0.085 U
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE				8000					
CHROMIUM	7440-47-3	100	100	0.63 J	1.4	5.1	2.3	2.7	4.2	5.8	2.4	5.3
IRON	7439-89-6	NE	300	22	34	59	75	66 J	210 J	6000	69	520
SODIUM	82115-62-6	NE	NE				24000					
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³								1 U	
Filtered Metals (µg/L)												
CHROMIUM	7440-47-3	100	100							0.23 J		
IRON	7439-89-6	NE	300							70		
Miscellaneous (µg/L)												
TOTAL ORGANIC CARBON		NE	NE									

Notes:
MCL = Maximum Contaminant Level
NYSDOH = New York State Department of Health
bgs = below ground surface
µg/L = micrograms per liter
U = Non Detect
J = Estimated Value
Blank cell = No sample
NE = Not Established
Bolded value indicates exceedance of Federal or NYSDOH MCLs
¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at <http://www.epa.gov/safewater/contaminants/index.html#primary>
² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at <http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm>
³ There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3
ANALYTICAL DETECTIONS MONITORING WELLS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK
PAGE 3 OF 5

	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs ⁽²⁾	BPS1-TT-MW304S- 01182012	BPS1-TT-MW304I1- 01182012	BPS1-TT-MW304I2- 01182012	BPS1-TT-MW304I2- 01182012 DUPLICATE	BPS1-TT-MW304D- 01192012	BPS1-TT-MW305S- 01172012	BPS1-TT-MW305S- 01172012 DUPLICATE	BPS1-TT-MW305I- 01172012	BPS1-TT-MW305D- 01172012
Sample Date				1/18/2012	1/18/2012	1/18/2012	1/18/2012	1/19/2012	1/17/2012	1/17/2012	1/17/2012	1/17/2012
Sample Interval (feet bgs)				43-53	102-112	140-150	140-150	180-190	40-50	40-50	190-200	286-296
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	1.7	0.26 J	0.23 J	0.5 U	0.5 U	0.5 U	0.28 J	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1	0.33 J
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.7	0.57 J
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3	0.73 J
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.27 J	0.19 J
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	6	2.7	2.8	0.5 U	0.5 U	0.5 U	4.7	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.5 U	25	5.5	5.5	0.5 U	0.5 U	0.5 U	3.3	1.9
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.5 U	4.1	1.7	1.8	0.5 U	0.5 U	0.5 U	3900	140
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.91 J	0.94 J
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.16 J
AROCLOR-1248	12672-29-6	0.5	0.5	0.08 U	0.97	1.5	1.6	4.2	0.08 U	0.08 U	1.3	0.08 U
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE									
CHROMIUM	7440-47-3	100	100	1.4	38	200	170	4.5	2.4	2.6	3.5	22
IRON	7439-89-6	NE	300	58	400	16 J	10 J	160	560	650	1100	1100
SODIUM	82115-62-6	NE	NE									
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³		35.5	181	182					1 U
Filtered Metals (µg/L)												
CHROMIUM	7440-47-3	100	100									
IRON	7439-89-6	NE	300									
Miscellaneous (µg/L)												
TOTAL ORGANIC CARBON		NE	NE									

Notes:
MCL = Maximum Contaminant Level
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bgs = below ground surface
µg/L = micrograms per liter
U = Non Detect
J = Estimated Value
Blank cell = No sample
NE = Not Established
Bolded value indicates exceedance of Federal or NYSDOH MCLs
¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at <http://www.epa.gov/safewater/contaminants/index.html#primary>
² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at <http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm>
³ There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3
ANALYTICAL DETECTIONS MONITORING WELLS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK
PAGE 4 OF 5

	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs ⁽²⁾	BPS1-TT-MW306S- 01232012	BPS1-TT-MW306I- 01232012	BPS1-TT-MW306D- 01232012	BPS1-TT-MW307S- 01182012	BPS1-TT-MW307I- 01182012	BPS1-TT-MW307D- 01182012	BPS1-TT-MW308S- 01162012	BPS1-TT-MW308I- 01162012	BPS1-TT-MW308D- 01162012
Sample Date				1/23/2012	1/23/2012	1/23/2012	1/18/2012	1/18/2012	1/18/2012	1/16/2012	1/16/2012	1/16/2012
Sample Interval (feet bgs)				50-60	189-199	284-294	40.5-50.5	188-198	276-286	54-64	156-166	250-260
Volatile Organic Compounds(µg/L)												
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	0.5 U	0.5 U	0.24 J	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.19 J
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.4 J	0.5 U	0.44 J	1.3	1.1	0.5 U	0.5 U	0.5 U	0.7 J
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.5 U	0.54 J	2.4	0.57 J	1.8	0.5 U	0.71 J	0.5 U	1.6
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Polychlorinated Biphenyls (µg/L)												
AROCLOR-1242	53469-21-9	0.5	0.5	0.08 U	0.08 U	0.61 J	0.08 U	0.08 U	0.56	0.08 U	0.52	0.073 J
AROCLOR-1248	12672-29-6	0.5	0.5	0.54	1.8	0.08 U	0.08 U	0.84	0.08 U	0.2	0.08 U	0.08 U
Metals (µg/L)												
CALCIUM	7440-70 -2	NE	NE									
CHROMIUM	7440-47-3	100	100	1.3	2.3	1.2	4	12	13	10	10	17
IRON	7439-89-6	NE	300	310	93	77	530	460	460	150	240	240
SODIUM	82115-62-6	NE	NE									
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³	1 U	1 U			1 U				
Filtered Metals (µg/L)												
CHROMIUM	7440-47-3	100	100									
IRON	7439-89-6	NE	300									
Miscellaneous (µg/L)												
TOTAL ORGANIC CARBON		NE	NE	710 J	3300	1100						

Notes:
MCL = Maximum Contaminant Level
NYSDOH = New York State Department of Health
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J = Estimated Value
Blank cell = No sample
NE = Not Established
Bolded value indicates exceedance of Federal or NYSDOH MCLs
¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at <http://www.epa.gov/safewater/contaminants/index.html#primary>
² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at <http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm>
³ There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

TABLE 4-3
ANALYTICAL DETECTIONS MONITORING WELLS
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK
PAGE 5 OF 5

	CAS No.	Federal MCLs ⁽¹⁾	NYSDOH MCLs ⁽²⁾	BPS1-TT-MW309S- 01102012	BPS1-TT-MW309I- 01112012	BPS1-TT-MW309D- 01112012
Sample Date				1/10/2012	1/11/2012	1/11/2012
Sample Interval (feet bgs)				53-63	160-170	252-262
Volatile Organic Compounds(µg/L)						
1,1,1-TRICHLOROETHANE	71-55-6	200	5	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	NE	50	0.5 U	0.5 U	0.45 J
1,1-DICHLOROETHANE	75-34-3	NE	5	0.5 U	0.5 U	0.27 J
1,1-DICHLOROETHENE	75-35-4	7	5	0.5 U	0.5 U	0.5 U
CARBON DISULFIDE	75-15-0	NE	50	0.5 U	0.5 U	0.5 U
CHLOROFORM	67-66-3	NE	50	0.5 U	0.5 U	0.5 U
CIS-1,2-DICHLOROETHENE	156-59-2	70	5	0.5 U	0.5 U	0.5 U
METHYL ACETATE	79-20-9	NE	50	0.5 U	0.5 U	0.5 U
METHYL TERT-BUTYL ETHER	1634-04-4	NE	10	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	127-18-4	5	5	0.5 U	0.5 U	1.1
TOLUENE	108-88-3	1000	5	0.1 U	0.1 U	0.1 U
TRANS-1,2-DICHLOROETHENE	156-60-5	5	5	0.5 U	0.5 U	0.5 U
TRICHLOROETHENE	79-01-6	5	5	0.61 J	0.5 U	1.8
TRICHLOROFLUOROMETHANE	75-69-4	NE	50	0.5 U	0.5 U	0.5 U
Polychlorinated Biphenyls (µg/L)						
AROCLOR-1242	53469-21-9	0.5	0.5	0.086 U	0.43	0.085 U
AROCLOR-1248	12672-29-6	0.5	0.5	1	0.08 U	0.085 U
Metals (µg/L)						
CALCIUM	7440-70 -2	NE	NE			
CHROMIUM	7440-47-3	100	100	18	49	7.5
IRON	7439-89-6	NE	300	2100	130	2400
SODIUM	82115-62-6	NE	NE			
HEXAVALENT CHROMIUM	18540-29-9	100 ³	100 ³	8.9 J	47.7	1 U
Filtered Metals (µg/L)						
CHROMIUM	7440-47-3	100	100	13		0.56 J
IRON	7439-89-6	NE	300	92		31
Miscellaneous (µg/L)						
TOTAL ORGANIC CARBON		NE	NE			

Notes:
MCL = Maximum Contaminant Level
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U = Non Detect
J = Estimated Value
Blank cell = No sample
NE = Not Established
Bolded value indicates exceedance of Federal or NYSDOH MCLs
¹ (USEPA, 2007) Drinking Water Contaminants National Primary Drinking Water Regulations, from the USEPA website at <http://www.epa.gov/safewater/contaminants/index.html#primary>
² (NYSDOH, 2004) New York Public Supply Regulations, 10 NYCRR Part 5, Subpart 5-1 Public Water Systems, Table 3-Organic Chemicals Maximum Contaminant Level Determination and Table 9D - Organic Chemicals - Principal Organic Contaminants, from the NYSDOH website at <http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm>
³ There is no promulgated Hexavalent Chromium standard. Total Chromium MCL used instead.

FIGURES





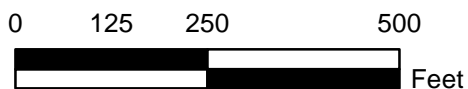
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Legend

-  Surface Water
-  Existing Monitoring Well



**Sample Location Map
Site 1-Former Drum Marshalling Area
NWIRP Bethpage
Bethpage, New York**




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FIGURE NO.	FIGURE 3-1	DATE 8/2/12

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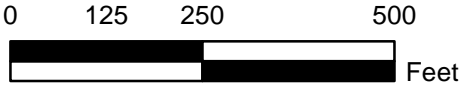
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Legend

-  Existing Monitoring Well
-  Groundwater Contours (Feet MSL)
-  Groundwater Elevation (feet MSL)

Notes:
Dashed lines are inferred
MSL-mean sea level



Potentiometric Surface Map
Shallow January 2012
Site 1-Former Drum Marshalling Area
NWIRP Bethpage
Bethpage, New York

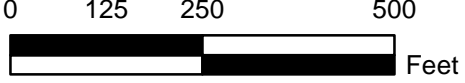
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FIGURE NO.	FIGURE 3-2	REV	DATE
			8/2/12



Legend

- Existing Monitoring Well
- Groundwater Contours (Feet MSL)
- Groundwater Elevation (feet MSL)

Notes:
Dashed lines are inferred
MSL-mean sea level






**Potentiometric Surface Map
Intermediate January 2012
Site 1-Former Drum Marshalling Area
NWIRP Bethpage
Bethpage, New York**

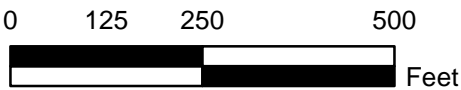
FILE	112G02230	SCALE	AS NOTED
FIGURE NO.	FIGURE 3-3	REV	DATE
			8/2/12



Legend

-  Existing Monitoring Well
-  Groundwater Contours (Feet MSL)
-  Groundwater Elevation (feet MSL)

Notes:
Dashed lines are inferred
MSL-mean sea level



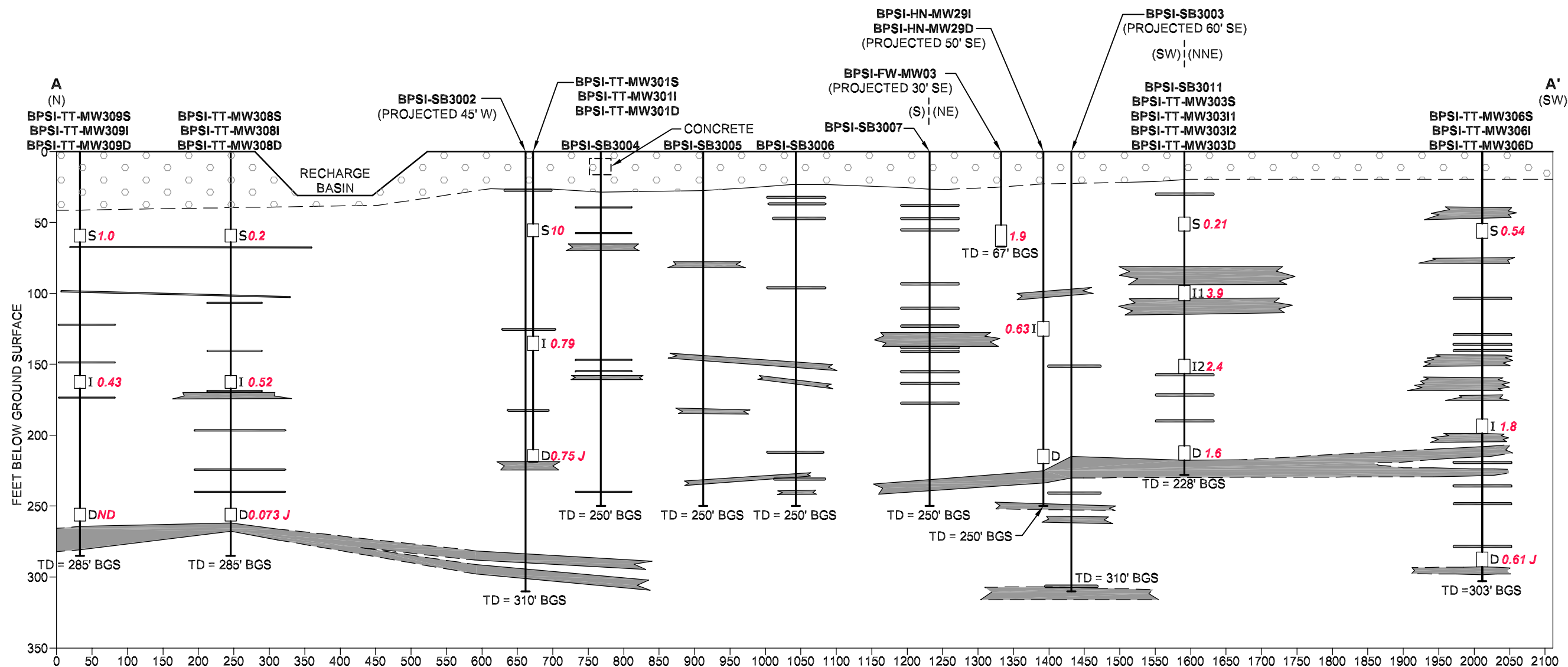
**Potentiometric Surface Map
Deep January 2012
Site 1-Former Drum Marshalling Area
NWIRP Bethpage
Bethpage, New York**

FILE	112G02230	SCALE	AS NOTED
FIGURE NO.	FIGURE 3-4	REV	DATE
			8/2/12

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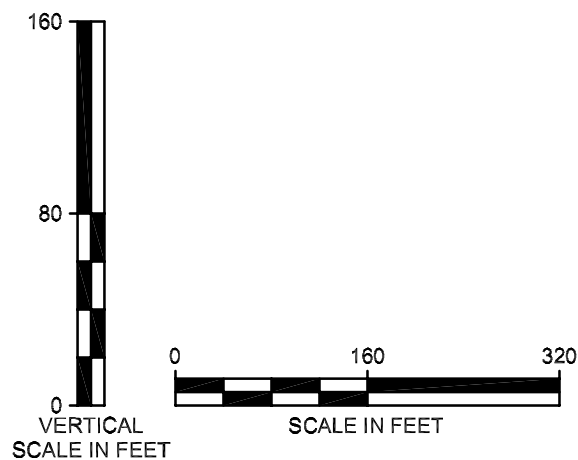




LEGEND

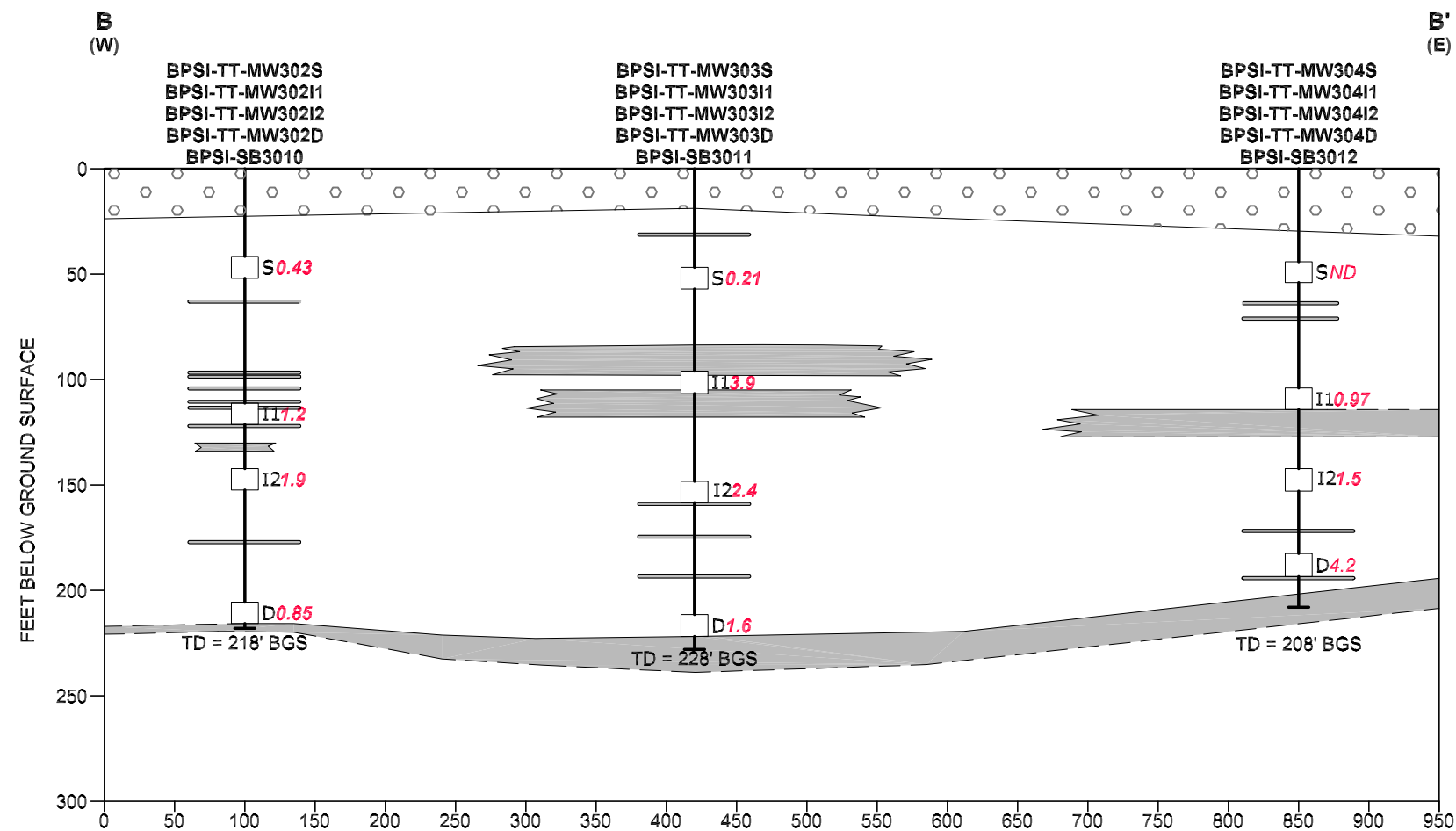
- SAND AND GRAVEL
- SAND WITH VARYING AMOUNTS OF SILT, CLAY, AND GRAVEL
- CLAY, CLAYEY SILT, OR SILT
- BPSI-SB3011** SOIL BORING
- BPSI-TT-MW303S** MONITORING WELL
- PROJECTED DISTANCE AND DIRECTION TO CROSS SECTION LINE

- GROUND SURFACE (APPROXIMATED TO BE FLAT)
- SILT OR CLAY LAYER (DASHED WHERE INFERRED)
- SILT OR CLAY LENS (FEW INCHES THICK)
- MONITORING WELL SCREEN AND JANUARY 2012 TOTAL PCBs IN MICROGRAMS PER LITER (µg/L)
- TOTAL DEPTH FEET BELOW GROUND SURFACE (BGS)
- NON-DETECT



GEOLOGIC CROSS SECTION A – A'
SITE 1 – FORMER DRUM
MARSHALLING AREA
NAVAL WEAPONS INDUSTRIAL
RESERVE PLANT
BETHPAGE, NEW YORK

FILE 112G01041GS46	SCALE AS NOTED
FIGURE NUMBER FIGURE 4–2	REV 0
	DATE 06/06/12



LEGEND



SAND AND GRAVEL



SAND WITH VARYING AMOUNTS OF SILT, CLAY, AND GRAVEL



CLAY, CLAYEY SILT, OR SILT

BPSI-SB3011

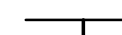
SOIL BORING

BPSI-TT-MW303S

MONITORING WELL

(PROJECTED 50' NW)

PROJECTED DISTANCE AND DIRECTION TO CROSS SECTION LINE



GROUND SURFACE (APPROXIMATED TO BE FLAT)



SILT OR CLAY LAYER (DASHED WHERE INFERRED)



SILT OR CLAY LENS (FEW INCHES THICK)



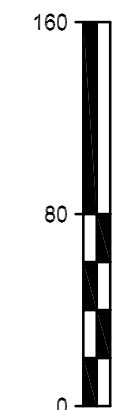
MONITORING WELL SCREEN AND JANUARY 2012 TOTAL PCBs IN MICROGRAMS PER LITER (µg/L)

TD = 250' BGS

TOTAL DEPTH FEET BELOW GROUND SURFACE (BGS)

ND

NON-DETECT



VERTICAL SCALE IN FEET



SCALE IN FEET



TETRA TECH

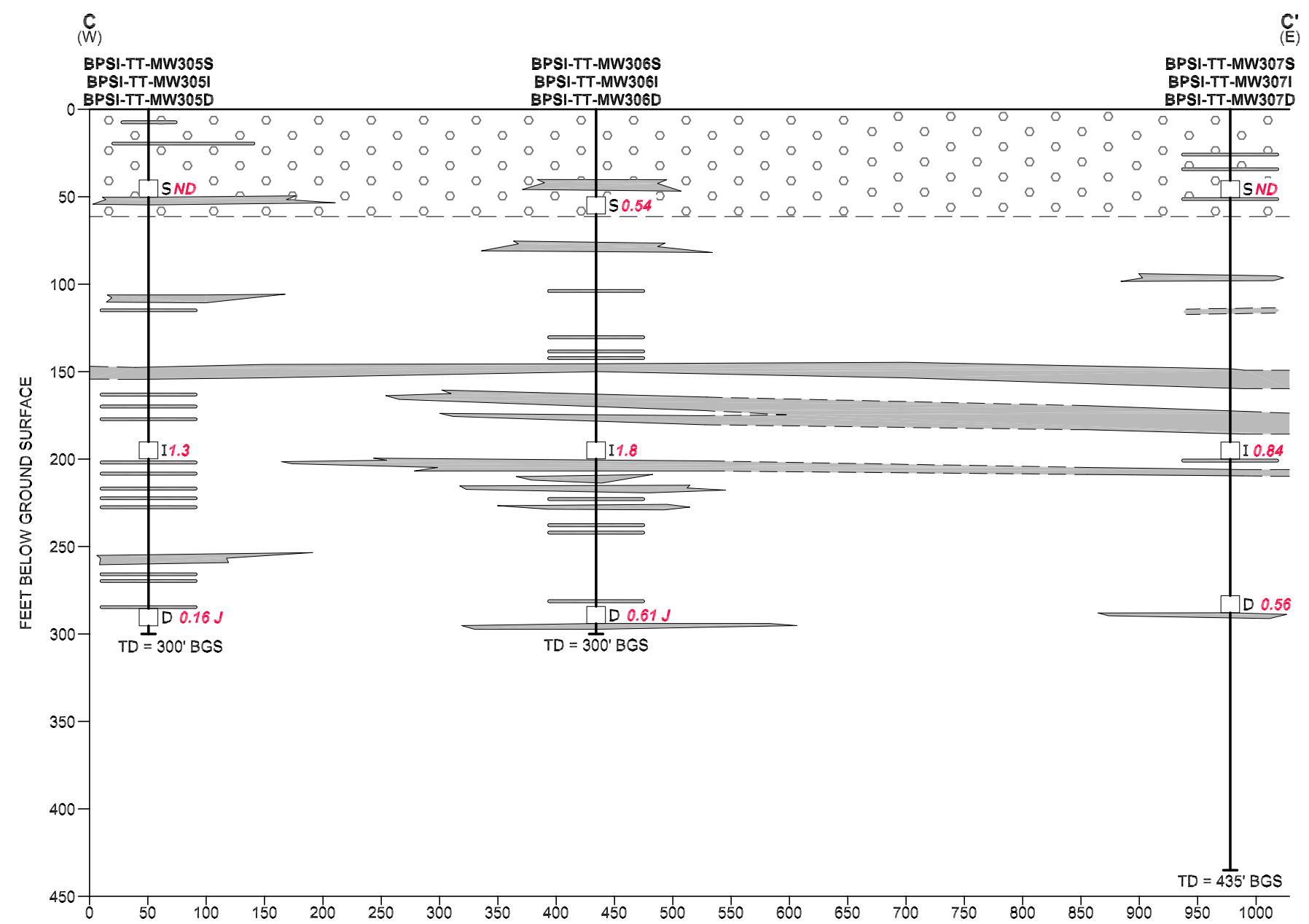
GEOLOGIC CROSS SECTION B – B'
SITE 1 – FORMER DRUM
MARSHALLING AREA
NAVAL WEAPONS INDUSTRIAL
RESERVE PLANT
BETHPAGE, NEW YORK

FILE
112G01041GS44

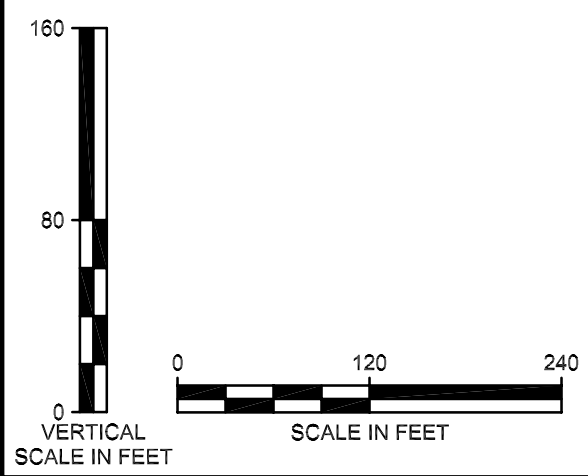
SCALE
AS NOTED

FIGURE NUMBER
FIGURE 4–3

REV
0
DATE
04/03/12



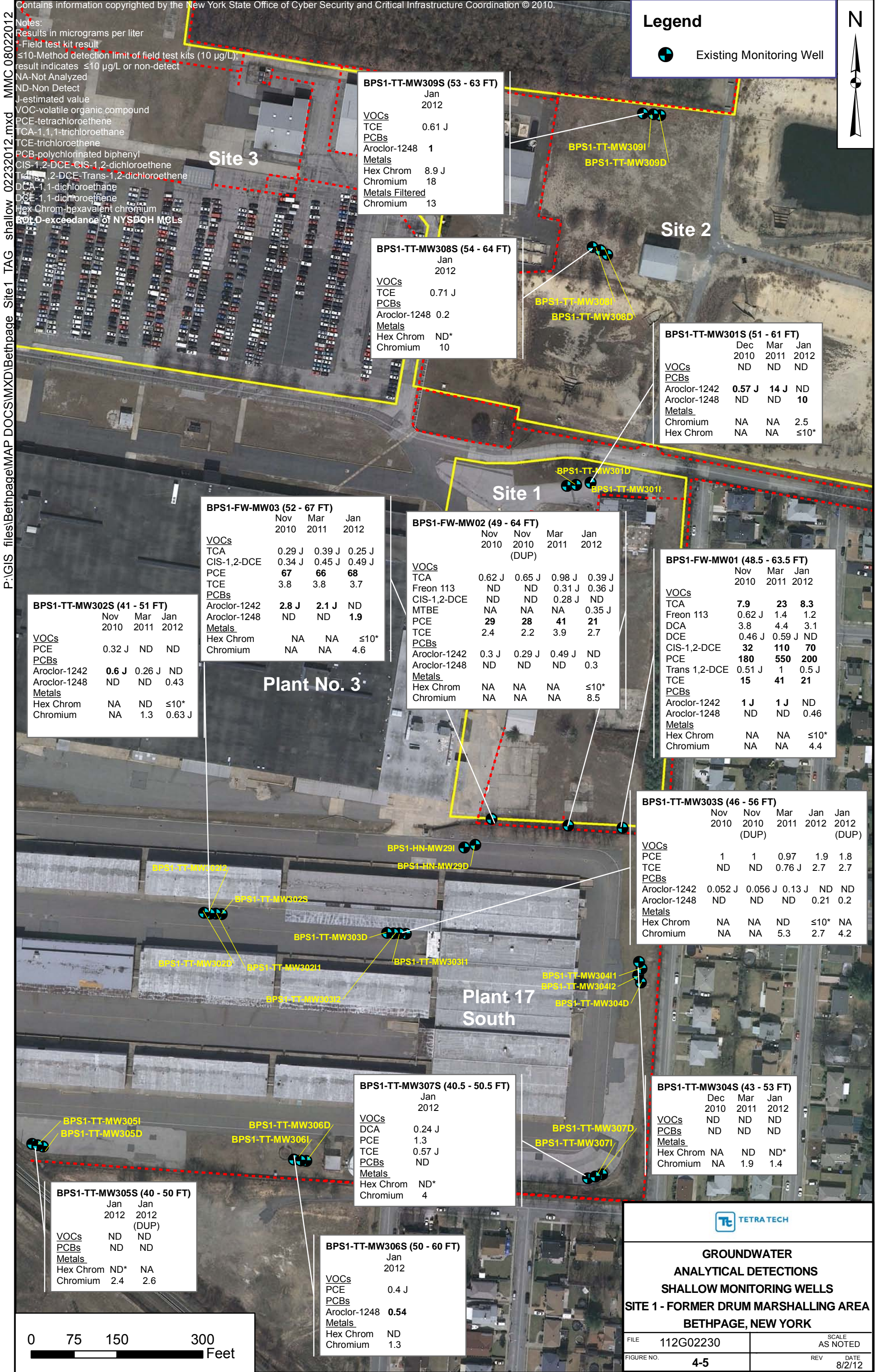
- LEGEND**
- SAND AND GRAVEL
 - SAND WITH VARYING AMOUNTS OF SILT, CLAY, AND GRAVEL
 - CLAY, CLAYEY SILT, OR SANDY CLAY
 - BPSI-TT-MW305S** MONITORING WELL
 - GROUND SURFACE (APPROXIMATED TO BE FLAT)
 - SILT OR CLAY LAYER (DASHED WHERE INFERRED)
 - SILT OR CLAY LENS (FEW INCHES THICK)
 - MONITORING WELL SCREEN AND JANUARY 2012 TOTAL PCBs IN MICROGRAMS PER LITER (µg/L)
 - TOTAL DEPTH FEET BELOW GROUND SURFACE (BGS)
 - ND** NON-DETECT
 - J** ESTIMATED VALUE

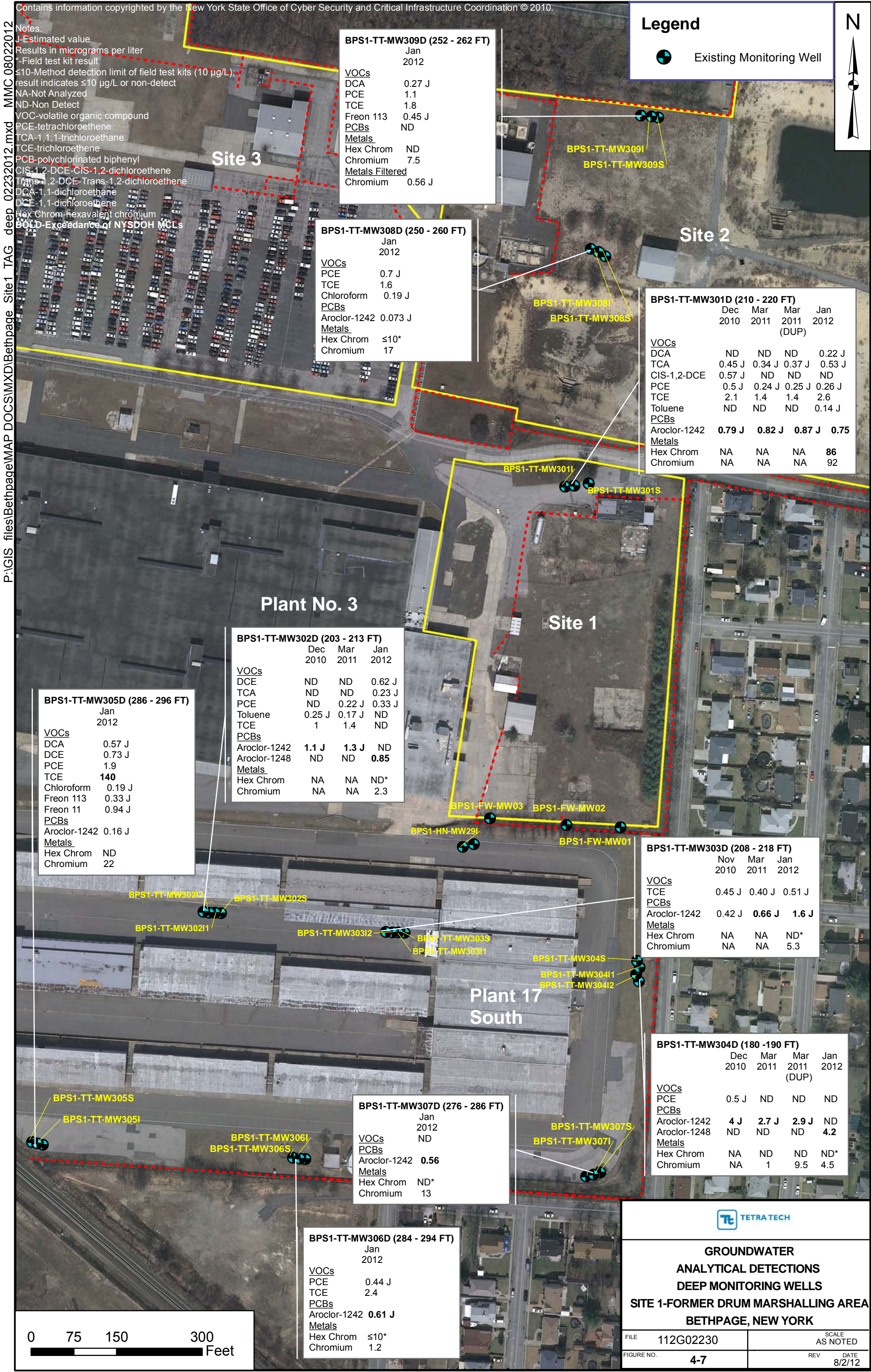


TETRA TECH

GEOLOGIC CROSS SECTION C – C’
SITE 1 – FORMER DRUM
MARSHALLING AREA
NAVAL WEAPONS INDUSTRIAL
RESERVE PLANT
BETHPAGE, NEW YORK

FILE 112G01041GS45	SCALE AS NOTED
FIGURE NUMBER FIGURE 4–4	REV 0
	DATE 04/03/12





APPENDICES

Appendix A
Field Forms, Logsheets, and Documentation

Boring Logs



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
 DATE: 11/12/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-1	0-1					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2						trace-little, med. Gravel,moist.	SM	Set 8" ID steel surface				
	2-3								casing to 25'				
	3-4								(Gueci - Failing F10)				
	4-5												
S-2	5-6					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7						trace-little, med. Gravel,moist.	SM					
	7-8												
	8-9												
	9-10												
S-3	10-11					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12						little- med. to coarse gravel.	SM/ML					
	12-13						(11'-12' silt)		Geophysical log.				
	13-14						moist						
	14-15												
S-4	15-16					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17						little- med. to coarse gravel.	SM					
	17-18						moist						
	18-19												
	19-20												
S-5	20-21					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22						little- med. to coarse gravel.	SM					
	22-23						moist						
	23-24								Lost +/- 200 gals. Drill-				
	24-25								mud between 25'-48'.				

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: Set 8" I.D. Sch. 40 steel surface casing to 25' below ground surface.
 12" ID HAS borehole to 25' BGS, annular space filled with bentonite at base. Soil backfill above.

Drilling Area

Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW305

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
 DATE: 10/15/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-6	25-26					Tan-Lt. brn	Fine to coarse sand and	SM/GM	Screened mud rotary	0	0	0	0
	26-27						fine to coarse gravel, moist.	SM/GM	cuttings.				
	27-28								Lost +/- 200 gals. Drill-				
	28-29								mud between 25'-48'.				
	29-30												
S-7	30-31					Tan-Lt. brn	Silty, medium-coarse sand,	SM/GM	Screened mud rotary	0	0	0	0
	31-32						little- med. to coarse gravel.	SM/GM	cuttings.				
	32-33						moist	ML	Geophysical log.				
	33-34							ML	Geophysical log.				
	34-35							ML	Geophysical log.				
S-8	35-36					Tan-Lt. brn	Silty, medium-coarse sand,	SM/GM	Screened mud rotary	0	0	0	0
	36-37						little- med. to coarse gravel.	SM/GM	cuttings.				
	37-38						moist						
	38-39												
	39-40												
S-9	40-41					Light brn	Silty, medium-coarse sand,	SM/GM	Screened mud rotary	0	0	0	0
	41-42						little- med. to coarse gravel.	SM/GM	cuttings.				
	42-43						moist						
	43-44												
	44-45												
S-10	45-46					Tan	Fine-coarse sand,	SW	Screened mud rotary	0	0	0	0
	46-47						little- med. to coarse gravel.	SW	cuttings.				
	47-48						moist						
S-11*	48-49	10-22			Dense	Tan to	Silty, medium-coarse sand, wet.	sm sc	Split spoon sample	0	0	0	0
	49-50	21-20				Org brn	trace f.-c. gravel, clay laminae	sm sc	10:40				

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

 Drilling Area
 Background (ppm): 0

Converted to Well:

Yes

X

No

Well I.D. #: BPS1-TT-MW-305

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
 DATE: 11/15/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-12	50-51					Light brn	Sandy (very fine to fine) silt.	ML	Screened mud rotary	0	0	0	0
	51-52						Silt (Geophysical log)	ML	cuttings and geo-				
	52-53						Silt (Geophysical log)	ML					
	53-54						Silt (Geophysical log)	ML					
	54-55						Silt (Geophysical log)	ML					
S-13	55-56					Tan-Lt. brn	Fine to coarse sand and	SP	Screened mud rotary	0	0	0	0
	56-57						fine to coarse gravel, moist.	SP	cuttings.				
	57-58												
S-14*	58-59	16-21			Dense	Gray-white	Micaceous, medium to coarse	SP	Split spoon sample.	0	0	0	0
	59-60	23-24				Gray-white	sand, wet.	SP	11:10				
	60-61												
	61-62												
	62-63												
	63-64												
	64-65												
S-15	65-66					Tan - brn	Micaceous, fine to coarse sand,	SP	Screened mud rotary	0	0	0	0
	66-67						little silt, wet.	SP	cuttings.				
	67-68												
	68-69												
	69-70												
S-16	70-71					Tan - brn	Micaceous, fine to coarse sand	SM	Screened mud rotary	0	0	0	0
	71-72						with silt laminae, wet.	SM	cuttings.				
	72-73												
	73-74												
	74-75												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

Drilling Area
 Background (ppm): 0

Converted to Well:

Yes

X

No

Well I.D. #: BPS1-TT-MW-305

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
 DATE: 11/15/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-17	75-76					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	76-77						sand with silt laminae, trace to	SM	cuttings.				
	77-78						little lignite						
	78-79												
	79-80												
S-18	80-81					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	81-82						sand with silt laminae, trace to	SM	cuttings.				
	82-83						little lignite						
	83-84												
	84-85												
S-19	85-86					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	86-87						sand with silt laminae, trace to	SM	cuttings.				
	87-88						little lignite						
	88-89												
	89-90												
S-20	90-91					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	91-92						sand with silt laminae, trace to	SM	cuttings.				
	92-93						little lignite						
	93-94												
	94-95												
	95-96												
	96-97												
	97-98												
	98-99												
	99-100												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

 Drilling Area
 Background (ppm): 0

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
 DATE: 11/15/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-21	100-101					Tan - Org. brn	Silty, fine to medium sand	ML/SM	Screened mud rotary	0	0	0	0
	101-102						with silt laminae, trace to	ML/SM	cuttings.				
	102-103						little lignite						
	103-104												
	104-105												
	105-106												
	106-107						Sandy silt.	ML	Geophysical log.				
	107-108						Sandy silt.	ML					
	108-109												
	109-110												
	110-111					Tan - Org. brn	Silty, micaceous, fine to coarse	ML/SM	Screened mud rotary	0	0	0	0
	111-112						sand with silt laminae.	ML/SM	cuttings.				
S-22	112-113						Silt and sandy silt.	ML/SM	Geophysical log.				
	113-114												
	114-115												
	115-116												
	116-117												
	117-118												
S-23	118-119												
	119-120												
	120-121					Tan - Org. brn	Silty, micaceous, medium to coars	SM	Screened mud rotary	0	0	0	0
	121-122						sand with silt laminae, trace to	SM	cuttings.				
	122-123						little lignite						
	123-124												
	124-125												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

Drilling Area
 Background (ppm): 0

Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-TT-MW-305

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
 DATE: 11/15/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	125-126												
	126-127												
	127-128												
	128-129												
	129-130												
S-24	130-131					Tan - Org. brn	Silty, micaceous, medium to coarse	SM	Screened mud rotary	0	0	0	0
	131-132						sand with silt laminae, trace to	SM	cuttings.				
	132-133						little lignite						
	133-134												
	134-135												
	135-136												
	136-137												
	137-138												
S-25*	138-139	25-28			Very Dense	Tan - Red brn	Silty, micaceous, medium to coarse	SM	Split spoon sample.	0	0	0	0
	139-140	31-33					sand w/ silt laminae, trace f. gravel.	SM	13:15				
	140-141												
	141-142												
	142-143												
	143-144												
	144-145												
	145-146												
	146-147						Sandy silt.		Geophysical log.				
	147-148												
S-26*	148-149	10-12				Tan - Gray	Sandy (fine), clay.	CL	Split spoon sample.	0	0	0	0
	149-150	15-20				Tan - Gray		CL	13:35				

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

Drilling Area
Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW-305

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW305
 PROJECT NUMBER: 112G02230 DATE: 11/15/2011
 DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson
 DRILLING RIG: Mud Rotary / Hollow Stem Auger DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151					Gray	Sandy, clay	CL	Geophysical log and				
	151-152							CL	mud rotary return.				
	152-153							CL					
	153-154							CL					
	154-155												
	155-156												
	156-157												
	157-158												
	158-159												
	159-160												
S-27	160-161					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	161-162						sand with silt laminae, tr.lignite.	SM	cuttings.				
	162-163												
	163-164												
	164-165						Silt (geophysical log)	ML					
	165-166												
	166-167												
	167-168												
	168-169						Silt (geophysical log)	ML					
	169-170						Silt (geophysical log)	ML					
S-28	170-171					Gray	Silty, micaceous, sandy silt and	ML/ SM	Screened mud rotary	0	0	0	0
	171-172						silty, very fine to fine sand.	ML/ SM	cuttings.				
	172-173								11/15/2011 Stopped				
	173-174								@ 173'.				
	174-175												

* When rock coring, enter rock brokenness.

** Include monitoring reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

Drilling Area
Background (ppm): 0Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW-305

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW305
 DATE: 11/16/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	175-176								11/16/2011 started				
	176-177								drilling from 173'.				
	177-178												
	178-179												
	179-180												
S-29	180-181					Gray	Silty, micaceous, sandy silt and	ML/ SM	Screened mud rotary	0	0	0	0
	181-182						silty, very fine to fine sand.	ML/ SM	cuttings.				
	182-183												
	183-184												
	184-185												
	185-186												
	186-187												
	187-188												
	188-189												
	189-190												
S-30	190-191					Gray	Silty, micaceous, sandy silt and	ML/ SM	Screened mud rotary	0	0	0	0
	191-192						silty, very fine to fine sand.	ML/ SM	cuttings.				
	192-193												
	193-194												
	194-195												
	195-196												
	196-197												
	197-198												
	198-199												
	199-200												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

Drilling Area
 Background (ppm): 0

Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-TT-MW-305

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW305
 PROJECT NUMBER: 112G02230 DATE: 11/16/2011
 DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson
 DRILLING RIG: Mud Rotary / Hollow Stem Auger DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-31	200-201	/				Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	201-202	/					sand with silt laminae, tr. lignite.	SM	cuttings.				
	202-203	/											
	203-204	/											
	204-205	/											
	205-206	/											
	206-207	/											
	207-208	/											
	208-209	/											
	209-210	/											
S-32	210-211	/				Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	211-212	/					sand with silt laminae, tr. lignite.	SM	cuttings.				
	212-213	/											
	213-214	/											
	214-215	/											
	215-216	/											
	216-217	/					Silt (geophysical log)	ML					
S-33	217-218	/				Dark brn	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	218-219	/				Dark brn	little to some silt, oxidized, wet.	SM GM	cuttings.				
	219-220	/											
	220-221	/											
	221-222	/											
	222-223	/											
	223-224	/											
	224-225	/					Silt (geophysical log)						

* When rock coring, enter rock brokenness.

** Include monitoring reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-TT-MW-305

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW305
 PROJECT NUMBER: 112G02230 DATE: 11/16/2011
 DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson
 DRILLING RIG: Mud Rotary / Hollow Stem Auger DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-34	225-226					Tan - Gray	Silty, very fine to fine sand	SM	Screened mud rotary	0	0	0	0
	226-227						trace to little silt laminae.	SM	cuttings.				
	227-228						Silt (geophysical log)	ML					
	228-229						Silt (geophysical log)	ML					
	229-230												
	230-231												
	231-232												
	232-233												
	233-234												
	234-235												
	235-236												
	236-237												
	237-238												
	238-239												
	239-240												
S-35	240-241					Dark brn to	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	241-242					Org brn	little to some silt, oxidized, wet.	SM GM	cuttings.				
	242-243												
	243-244												
	244-245												
	245-246												
	246-247												
	247-248												
	248-249												
	249-250												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW-305

**BORING LOG**

PROJECT NAME:	Site 1 - PCB Investigation	BORING No.:	BPS1-TT-MW305
PROJECT NUMBER:	112G02230	DATE:	11/16/2011
DRILLING COMPANY:	Delta Drilling	GEOLOGIST:	J. Ferguson
DRILLING RIG:	Mud Rotary / Hollow Stem Auger	DRILLER:	B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-36	250-251					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	251-252					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	252-253												
	253-254												
	254-255						Silt (geophysical log)	ML					
	255-256						Sandy (fine) clay.	CL/ SC	Geophysical log.				
	256-257							CL					
	257-258							CL					
	258-259							CL					
	259-260							CL					
	260-261												
	261-262												
S-37	262-263					Tan - Gray	Silty, micaceous fine sand and	Sm MI	Screened mud rotary	0	0	0	0
	263-264					Tan - Gray	sandy (fine), silt.	Sm MI	cuttings.				
	264-265												
	265-266												
	266-267												
	267-268												
	268-269												
	269-270												
	270-271												
	271-272												
	272-273												
S-38	273-274	18-23				Tan-brn	Silty fine to medium quartzose	SM	Mud rotary cuttings	0	0	0	0
	274-275	24-27				Tan-brn	sand.	SM					

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: Installed 2" ID Sch 40 PVC Well Screen from 286' to 296'.

#1 Silica sandpack from 271' to 300'.

4' Bentonite pellet seal 244' to 268'. Cetco bentonite/portland cement annular seal to 10' BGS.

Drilling Area
Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW-305

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation BORING No.: BPS1-TT-MW305
 PROJECT NUMBER: 112G02230 DATE: 11/16/2011
 DRILLING COMPANY: Delta Drilling GEOLOGIST: J. Ferguson
 DRILLING RIG: Mud Rotary / Hollow Stem Auger DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-39	275-276					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	276-277					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	277-278												
	278-279												
	279-280												
	280-281												
	281-282												
	282-283												
	283-284												
	284-285												
	285-286												
	286-287						Silt (geophysical log)	ML					
	287-288						Silt (geophysical log)	ML					
S-40*	288-289	18-24				Tan-Gray	Silty, very fine to fine sand.	SP SM	Split spoon sample.	0	0	0	0
	289-290	26-30							12:45				
	290-291												
	291-292												
	292-293												
	293-294												
	294-295												
	295-296												
	296-297												
	297-298												
S-41*	298-299	24-25				Tan- Org Brn.	Silty, very fine to fine sand.	SP SM	Split spoon sample.	0	0	0	0
	299-300	30-27					13:15	SP SM	Bottom of boring=300'.				

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: Set 2" ID well screen (10'-0.010 slot) from 286' to 296' below ground surface.Drilling Area
Background (ppm): 0Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW305



Tetra Tech NUS, Inc.

Page 1 of 13**BORING LOG**

PROJECT NAME: NWIRP Bethpage Site 1
 PROJECT NUMBER: 11260 2230
 DRILLING COMPANY: Delta
 DRILLING RIG: _____

BORING No.: MW-306-0
 DATE: 11-28-11
 GEOLOGIST: Vince Shickora
 DRILLER: Bill Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	1	/											
	2	/											
	3	/											
	4	/											
	5	/											
	6	/											
	7	/											
	8	/											
	9	/											
	10	/											
	11	/											
	12	/											
	13	/											
	14	/											
	15	/											
	16	/											
	17	/											
	18	/											
	19	/											
	20	/											
	21	/											
	22	/											
	23	/											
	24	/											
	25	/											

11/28/11



0925

8" casing

Completed on 11-23-11

Bm F-C Sand and F Gravel - little silt

0000

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: 8" steel drive casing installed to ~ 23' BGS

Drilling Area

Background (ppm): 07.5" Mod. rotary drilling 0' to 300' BGS2" x 2' stainless split spoon samples at selected depths

Converted to Well:

Yes

No

Well I.D. #:



Tetra Tech NUS, Inc.

BORING LOGPage 2 of 13

PROJECT NAME: NW ERP Bethpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Portadrigill

BORING No.: MW-3060
 DATE: 11-28-11
 GEOLOGIST: V. Shickora
 DRILLER: B. Murphy

Time

0930

0932

0946

0957

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	26					Bm	F-C Sand - with F-M Gravel - Little Silt			0	0	0	0
	27												
	28												
	29												
	30									0	0	0	0
	31												
	32					Bm	F-C Sand - with F-M Gravel						
	33					Rel	Little Silt - Trace mica						
	34												
	35									0	0	0	0
	36												
	37					org							
	38					Bm							
	39												
	40						Same as above			0	0	0	0
	41												
	42						(More silt)						
	43					org	(Trace clay)						
	44					Bm							
	45					org	Silt - little clay Trace F-C Sand and Gravel			0	0	0	0
	46												
	47												
	48												
S-1	49	12/17	19"			Gr	F-M Sand - little silt - Trace clay			0	0	0	0
	50	21/25	24"			Br	and C Sand			0	0	0	0

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: (see page 1)
 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☐ No ☐ Well I.D. #: _____

**BORING LOG**

PROJECT NAME: NWIRP Bethesda
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Perforator

BORING No.: MW-306J
 DATE: 11-28-11
 GEOLOGIST: V. Shickora
 DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION		U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color			Sample	Sampler BZ	Borehole**	Driller BZ**
	51					Gry F-M Sand - little Brn silt - Trace clay			0	0	0	0
	52					and C Sand - F Gravel						
	53											
	54											
	55					Brn Same as above			0	0	0	0
	56											
	57											
	58											
	59	23	31	19"		Brn F-M Sand - Trace						
	60	35	34	24"		Wht silt			0	0	0	0
	61											
	62											
	63					(Trace C sand)						
	64											
	65					Brn T21 Same as above			0	0	0	0
	66											
	67											
	68					(Trace C sand) (F Gravel)						
	69					Gry Brn T21 Same as above			0	0	0	0
	70											
	71					(Trace C sand)						
	72											
	73											
	74					Gry Brn T21 Same as above			0	0	0	0
	75											

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: (see page 1)
 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☐ No ☐ Well I.D. #: _____



Tetra Tech NUS, Inc.

BORING LOGPage 4 of 13

PROJECT NAME: NWIRP Bathpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Pertadrig

BORING No.: MW-3060
 DATE: 11-28-11
 GEOLOGIST: V. Shickora
 DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION		U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color			Sample	Sampler BZ	Borehole**	Driller BZ**
	76	/				Gry F-M Sand - Trace Dm Silt, R Sand and T21 F Gravel			0	0	0	0
	77	/										
	78	/										
	79	/				Gry Dm T21						
	80	/				Same as above			0	0	0	0
	81	/										
	82	/				(micaceous)						
	83	/										
	84	/				Gry Dm T21						
	85	/				Same as above			0	0	0	0
	86	/										
	87	/										
	88	/				(micaceous)						
	89	/				Gry Dm T21						
	90	/				Same as above			0	0	0	0
	91	/										
	92	/										
	93	/				(micaceous)						
	94	/				Gry Dm T21						
	95	/				Same as above			0	0	0	0
	96	/										
	97	/										
	98	/										
	99	/				Gry Dm T21						
	100	/				Same as above			0	0	0	0

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: (see page 1)
 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☐ No ☐ Well I.D. #: 6



Tetra Tech NUS, Inc.

Page 5 of 13**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Portadell

BORING No.: MW-3060
 DATE: 11-28-11
 GEOLOGIST: V. Shickusa
 DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	101	/				Brn Gry Ten	F-M Sand - Trace silt C sand and F gravel			0	0	0	0
	102	/											
	103	/					(micaceous)						
	104	/				Gry Brn Ten	Same as above			0	0	0	0
	105	/											
	106	/					(more silt)						
	107	/											
	108	/											
	109	/				Gry Brn Ten	Same as above			0	0	0	0
	110	/											
	111	/					(little clay)						
	112	/											
	113	/				Gry Brn Ten	Same as above			0	0	0	0
	114	/											
	115	/					(little clay)						
	116	/											
	117	/											
1228	118	/											
1242	119	/				Gry Brn Ten	F sand - little silt Trace clay and C sand			0	0	0	0
	120	/											
	121	/											
	122	/					(micaceous)						
	123	/											
	124	/				Gry Brn Ten	Same as above			0	0	0	0
	125	/											

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: (see page 1)
 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☐ No ☐ Well I.D. #: _____

**BORING LOG**

PROJECT NAME: NWIRP Belpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Portadri11

BORING No.: MW-306.1
 DATE: 11-28-11
 GEOLOGIST: V. Slickert
 DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION		U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color			Sample	Sampler BZ	Borehole**	Driller BZ**
	126					Gry Bn Tan		F-Sand - little silt Trace C Sand and clay	0	0	0	0
	127											
	128							(micaceous)				
	129					Gry Bn Tan		F-M Sand - little C Sand and silt	0	0	0	0
	130							Trace clay				
	131							(some weathered rock frags)				
	132							rust stains				
	133											
	134					Gry Tan Bn		F Sand - little silt Trace C Sand and clay	0	0	0	0
	135							(micaceous)				
	136											
	137											
1254	138					Gry Bn Tan		F Sand - little silt Trace C Sand and clay				
1304	5-3. 139	22/29	20"									
1312	↓ 140	33/36	24"						0	0	0	0
	141											
	142							(micaceous)				
	143											
	144					Gry Bn Tan		Same as above	0	0	0	0
	145											
	146											
	147											
	148							(Trace weathered rock frags)				
	149					Gry Bn Tan		Same as above	0	0	0	0
	150											

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: (see page 1)
 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☐ No ☐ Well I.D. #: _____



Tetra Tech NUS, Inc.

Page 7 of 13**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 11260 2230
 DRILLING COMPANY: Delta
 DRILLING RIG: Portadill

BORING No.: MW-306V
 DATE: 11-28-11
 GEOLOGIST: V. Shickel
 DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	151					Gry Brn Tan	F-Sand - little silt Trace C sand and clay			0	0	0	0
	152						(little clay)			0	0	0	0
	153												
	154					Gry Brn Tan	Same as above			0	0	0	0
	155												
	156												
	157												
1348	158					Red							
1401	S-4 159	13/17				Gry Brn Tan	Silt - some clay and little F-Sand						
1406	160	17/19								0	0	0	0
1416	161												
	162												
	163						(Trace C Sand)						
	164					Gry Brn Tan	Same as above			0	0	0	0
	165												
	166												
	167												
	168						(Trace weathered rock frags)						
	169					Gry Brn Tan	Same as above			0	0	0	0
	170												
	171												
	172												
1424	173						(Trace weathered rock frags)						
1435	174					Gry Brn Tan	Same as above			0	0	0	0
	175												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: (see page 1)

Drilling Area

Background (ppm): 0

Converted to Well:

Yes

No

Well I.D. #:

**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Portadrill

BORING No.: MW-306
 DATE: 11-28-11 / 11-29-11
 GEOLOGIST: V. Shukla
 DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	176					Gry Brn Tan	Silt-Sand clay and little F Sand			0	0	0	0
	177						Trace weathered rock frags						
	178												
	179					Red							
	180					Gry Tan	Same as above			0	0	0	0
	181												
	182												
	183												
	184					Gry Brn Tan							
	185						Same as above			0	0	0	0
	186												
	187												
	188												
	189					Gry Brn Tan							
	190						Same as above			0	0	0	0
	191												
	192						(more F Sand)						
	193						(micaceous)						
	194					Gry Brn Tan							
	195						Same as above			0	0	0	0
	196												
	197						(more F Sand)						
	198						(micaceous)						
	199					Gry Brn Tan							
	200						Same as above			0	0	0	0

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: (See page 1)

Drilling Area
 Background (ppm): 0

Converted to Well: Yes ☐ No ☐ Well I.D. #: _____



Tetra Tech NUS, Inc.

Page 9 of 13**BORING LOG**

PROJECT NAME: NWIRP Bath page
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Portabrig II

BORING No.: MW-306-D
 DATE: 11-29-11
 GEOLOGIST: V. Shickora
 DRILLER: B. Murphy

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
						Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
0931		201	/				Gry Brn Tan	Silt - Some to little clay and little F Sand Trace weathered rock fragments			0	0	0	0
		202	/											
		203	/											
		204	/				Gry Brn Tan	↓						
		205	/					Same as above			0	0	0	0
		206	/											
		207	/											
		208	/					(micaceous)						
		209	/				Gry Brn Tan	↓						
		210	/					Same as above			0	0	0	0
0949 1008		211	/											
		212	/											
		213	/											
		214	/				Gry Brn Tan	↓ (more clay)						
		215	/					Same as above			0	0	0	0
		216	/											
		217	/											
		218	/					(micaceous)						
		219	/				Gry Brn Tan	↓						
		220	/					Same as above			0	0	0	0
		221	/											
		222	/					(less clay)						
		223	/											
		224	/				Gry Brn Tan	↓						
		225	/					Same as above			0	0	0	0

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: (See page 1.)
 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☐ No ☐ Well I.D. #: _____



Tetra Tech NUS, Inc.

Page 10 of 13**BORING LOG**

PROJECT NAME: NWIRP Bath page
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Portadrill

BORING No.: MW-3060
 DATE: 11-29-11
 GEOLOGIST: V. Shickora
 DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION		U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color			Sample	Sampler BZ	Borehole**	Driller BZ**
	226	/				Gry Tan Bm		Silt. little clay and fine sand Trace weathered rock frags	0	0	0	0
	227	/										
	228	/										
	229	/				Gry Tan Bm		Same as above	0	0	0	0
	230	/										
	231	/										
	232	/										
	233	/										
	234	/				Gry Bm Tan		Same as above	0	0	0	0
	235	/										
	236	/										
	237	/						(micaceous)				
	238	/										
	239	/				Gry Bm Tan		Same as above	0	0	0	0
	240	/										
	241	/										
	242	/										
	243	/										
	244	/				Gry Bm Tan		Same as above	0	0	0	0
	245	/										
	246	/										
	247	/										
	248	/						(less clay)				
	249	/				Gry Bm Tan		Same as above	0	0	0	0
	250	/										

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: (See page 1)
 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☐ No ☐ Well I.D. #: _____



Tetra Tech NUS, Inc.

Page 11 of 13**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Porta-drill

BORING No.: MW-3060
 DATE: 11-29-11
 GEOLOGIST: V. Shickel
 DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION		U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color			Sample	Sampler BZ	Borehole**	Driller BZ**
	251					Gry Silt - little VP sand Bm and clay - Trace Tm weathered rock frags			0	0	0	0
	252											
	253					(more F-Sand)						
	254					Gry						
	255					Bm Same as above			0	0	0	0
	256											
	257					(more F-Sand)						
	258					(micaceous)						
	259					Gry						
	260					Bm Tm Same as above			0	0	0	0
	261											
	262					(less clay)						
	263											
	264					Gry						
	265					Tm Bm Same as above			0	0	0	0
	266											
	267											
	268					(less clay)						
	269					Gry						
	270					Bm Tm Same as above						
	271											
	272					(micaceous)						
	273					(more F-Sand)						
	274					Gry						
	275					Bm Tm Same as above						

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: (see page 1)
 Drilling Area
 Background (ppm): 23

 Converted to Well: Yes ☐ No ☐ Well I.D. #: _____

**BORING LOG**

PROJECT NAME: NWIRP Bct Page
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Porta-drill

BORING No.: MW-3060
 DATE: 11-29-11
 GEOLOGIST: V. Shickora
 DRILLER: B. Murphy

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION		U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color			Sample	Sampler BZ	Borehole**	Driller BZ**
	276					Gry Silty-Some F Sand and little to trace clay - trace rock frags			0	0	0	0
	277											
	278											
1115 1125	279	22/26	14"									
1132 1223	280	28/27	24"					Same as above	0	0	0	0
	281											
	282											
	283							(micaceous)				
	284											
	285					Gry Brn Tan		Same as above	0	0	0	0
	286											
	287											
	288							(micaceous)				
	289											
	290					Gry Brn Tan		Same as above	0	0	0	0
	291											
	292											
1231	293											
	294	29/36	12"			Brn Tan		F Sand - Some silt trace clay and weathered rock frags				
1243	295	37/43	24"						0	0	0	0
	296											
	297											
	298					Gry		(micaceous)				
	299					Brn						
	300					Tn		Same as above	0	0	0	0

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

 Remarks: (see page 1)
Hole completed to 303' BGS

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☐ No ☐ Well I.D. #: _____



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 10/28/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-1	0-1					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2					Dark Brn	tr. little, med. Gravel, moist.	SM					
	2-3												
	3-4												
	4-5												
S-2	5-6					Tan-Lt. brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7					Tan-Lt. brn	tr. little, med. Quartzose gravel	SM					
	7-8						moist.						
	8-9												
	9-10												
S-3	10-11					Tan-Lt. brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12					Tan-Lt. brn	tr. little, med. Quartzose gravel	SM					
	12-13						moist.						
	13-14												
	14-15												
S-4	15-16					Tan-Lt. brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17					Tan-Lt. brn	tr. little, med. Quartzose gravel	SM					
	17-18						moist.						
	18-19												
	19-20												
S-5	20-21					Tan-Lt. brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22					Tan-Lt. brn	tr. little, med. Quartzose gravel	SM					
	22-23						moist.						
	23-24												
	24-25												

Drilling Area

Remarks: Set 8" I.D. Sch. 40 steel surface casing to 25' below ground surface. (Failing F-10)Background (ppm): 012" ID HAS borehole to 25' BGS, annular space filled with bentonite at base. Soil backfill above. (Strieber/Pratt)Drilled borehole to depth on 10/28, installed casing 10/31.Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/3/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-6	25-26					Tan-brn	Silty, fine to coarse sand and	SM/GM	Screened mud rotary	0	0	0	0
	26-27						fine to coarse gravel moist.	SM/GM	cuttings. 08:37				
	27-28												
	28-29												
	29-30												
	30-31												
	31-32												
	32-33						Silt	ML	Geophysical log.				
	33-34							ML					
	34-35							ML					
S-7	35-36					Tan-brn	Silty, sandy (fine) fine to med	SM/GM	Screened mud rotary	0	0	0	0
	36-37					Tan-brn	quartzose gravel, and gravelly	SM/GM	cuttings.				
	37-38					Tan-brn	fine to coarse sand.	SM/GM					
	38-39												
	39-40												
	40-41												
	41-42												
	42-43												
	43-44												
	44-45												
	45-46								Mud takes in upper 25'-50'				
	46-47								of formation (+/-250 gal.)				
	47-48												
	48-49	19-23			Dense	Red brn	Silty, med-coarse sand, wet.	SM	Split spoon sample	0	0	0	0
S-8*	49-50	26-28				Red brn	tr. to little fine to med gravel.	SM	9:00				

Remarks: _____

 Drilling Area
 Background (ppm): 0

Converted to Well:

Yes

X

No

Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/3/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	50-51						Silt	ML	Geophysical log.				
	51-52												
	52-53												
	53-54												
	54-55												
	55-56									0	0	0	0
	56-57												
	57-58												
S-9*	58-59	22-23			Dense	Gray-Red brn	Silty, med to coarse sand,	SM	Split spoon sample.	0	0	0	0
	59-60	25-30				Gray-Red brn	tr. to little fine to med gravel,	SM					
	60-61					Gray-Red brn	wet.	SM					
S-11	61-62					Tan-Red brn	Silty, fine to coarse sand, tr.	SM SP	Screened mud rotary				
	62-63					Tan-Red brn	silt laminae, tr. fine gravel.	SM SP	cuttings.				
	63-64												
	64-65												
	65-66									0	0	0	0
	66-67					Tan-Red brn		SM SP					
	67-68												
	68-69												
	69-70												
	70-71									0	0	0	0
	71-72					Tan-Red brn		SM SP					
	72-73												
	73-74												
	74-75												

Remarks: _____

Drilling Area
 Background (ppm): 0

Converted to Well: _____

Yes

X

No

Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/3/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	75-76					Tan- Red brn	Silty, fine to coarse sand, tr.	SM SP	Screened mud rotary				
	76-77					Tan- Red brn	silt laminae, tr. fine gravel	SM SP	cuttings.				
	77-78						little lignite						
S-12	78-79					Red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	79-80					Red brn	gray silt laminae, tr. fine gravel.	SM	cuttings. 10:00				
	80-81												
	81-82												
	82-83												
	83-84												
	84-85												
	85-86												
	86-87												
	87-88												
S-13	88-89					Red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	89-90					Red brn	gray silt laminae, tr. fine gravel.	SM	cuttings. 10:20				
	90-91												
	91-92												
	92-93												
	93-94						Silt and clay	ML CL	Geophysical log.				
	94-95						Silt and clay	ML CL					
	95-96						Silt and clay	ML CL					
	96-97					Red brn		SM	Drillers mix additional mud				
	97-98								loss +/- 200 gals.				
S-14	98-99					Gray-red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	99-100					Gray-red brn	gray silt laminae, tr. fine gravel.	SM	cuttings. 10:25				

Remarks:

Drilling Area

Background (ppm):

0

Converted to Well:

Yes

☒

No

Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/3/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	100-101					Gray-red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary				
	101-102					Gray-red brn	gray silt laminae, tr. fine gravel.	SM	cuttings.				
	102-103												
	103-104												
	104-105												
	105-106												
	106-107												
	107-108												
S-15	108-109					Gray-red brn	Silty, fine to coarse sand, tr.	SM	Screened mud rotary	0	0	0	0
	109-110					Gray-red brn	gray silt laminae, tr. fine gravel.	SM	cuttings.				
	110-111												
	111-112												
	112-113												
	113-114												
	114-115												
	115-116												
	116-117												
	117-118												
S-16*	118-119	18-24				Gray-red brn	Micaceous, clayey, fine to med	SC CL	Screened mud rotary	0	0	0	0
	119-120	28-30				Gray-red brn	sand and sandy (fine) clay.	SC CL	cuttings.				
	120-121												
	121-122												
	122-123												
	123-124												
	124-125												

Remarks:

 Drilling Area
 Background (ppm): 0

Converted to Well:

Yes

X

No

Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/3/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	125-126	/											
	126-127	/											
	127-128	/											
S-17*	128-129	26-30			Dense	Gray-red	Silty very fine to fine sand.	SM SP	Split spoon sample.	0	0	0	0
	129-130	34-39				Gray-red		SM SP	11:31				
	130-131	/											
	131-132	/											
	132-133	/											
	133-134	/											
	134-135	/											
	135-136	/											
	136-137	/											
	137-138	/											
	138-139	/											
	139-140	/											
	140-141	/											
	141-142	/											
	142-143	/											
	143-144	/											
	144-145	/											
	145-146	/											
	146-147	/											
	147-148	/					Silt and clay	ML CL	Geophysical log.				
	148-149	/					Silt and clay	ML CL					
	149-150	/					Silt and clay	ML CL					

Remarks:

Drilling Area
 Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/3/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151	/					Silt and clay	ML CL	Geophysical log.				
	151-152	/											
	152-153	/											
	153-154	/											
	154-155	/											
	155-156	/											
	156-157	/											
	157-158	/						ML CL	Geophysical log.				
S-18	158-159	/				Tan-red brn	Sandy (fine-med) clay and	SC CL	Screened mud rotary	0	0	0	0
	159-160	/				Tan-red brn	clayey, fine-med sand.	SC CL	cuttings. 13:26				
	160-161	/											
	161-162	/											
	162-163	/											
	163-164	/											
	164-165	/											
	165-166	/											
	166-167	/											
	167-168	/											
	168-169	/											
	169-170	/											
	170-171	/					Silt and clay	ML CL	Geophysical log.				
	171-172	/											
	172-173	/											
	173-174	/											
	174-175	/											

Remarks:

 Drilling Area
 Background (ppm): 0

Converted to Well:

Yes

X

No

Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/3/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	175-176					Tan-red brn	Sandy (fine-med) clay and	SC CL	Screened mud rotary				
	176-177					Tan-red brn	clayey, fine-med. sand.	SC CL	cuttings. 13:26				
	177-178						Sandy silt and clay	ML CL	Geophysical log.				
	178-179												
	179-180												
	180-181												
	181-182												
	182-183												
	183-184												
	184-185												
	185-186												
	186-187												
	187-188												
	188-189												
	189-190												
	190-191												
	191-192												
	192-193												
	193-194												
	194-195												
	195-196												
	196-197												
	197-198												
	198-199						Sandy silt and clay	ML CL	Geophysical log.				
	199-200												

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/3-4/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	200-201						Sandy silt and clay	ML CL	Geophysical log.				
	201-202												
	202-203												
S-19	203-204					Tan	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	204-205					Tan	Interbedded sandy(fine) silt and	SM ML	cuttings. 14:45				
	205-206					Tan	silty fine sand.	SM ML	Geophysical log.				
	206-207												
	207-208												
S-20	208-209					Gray-org Brn	Interbedded sandy(fine) silt and	SM ML					
	209-210					Gray-org Brn	silty fine sand.	SM ML					
	210-211												
	211-212												
	212-213												
	213-214												
	214-215												
	215-216												
	216-217												
	217-218												
S-21*	218-219					Gray- Org Brn	Silty fine-med sand.	SM ML	Stopped @ 218' 11/03.				
	219-220					Gray- Org Brn		SM ML	Split spoon sample				
	220-221												
	221-222												
	222-223												
	223-224												
	224-225												

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/4/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-21	225-226	/				Tan- Org brn	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	226-227	/											
	227-228	/											
	228-229	/											
	229-230	/											
	230-231	/											
	231-232	/											
	232-233	/											
	233-234	/											
	234-235	/											
	235-236	/											
	236-237	/											
	237-238	/											
	238-239	/											
	239-240	/											
	240-241	/											
	241-242	/											
	242-243	/											
	243-244	/											
	244-245	/											
S-22	245-246	/				Tan- gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	246-247	/											
	247-248	/											
S-23*	248-249	/				Tan- gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	249-250	/					laminae.						

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/4/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	250-251	/											
	251-252	/											
	252-253	/											
	253-254	/											
	254-255	/											
	255-256	/											
	256-257	/											
	257-258	/											
	258-259	/											
	259-260	/											
S-24	260-261	/				Tan-gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	261-262	/				Tan-gray	Silty fine-med sand.	SM					
	262-263	/											
	263-264	/											
	264-265	/											
	265-266	/											
	266-267	/											
	267-268	/											
	268-269	/											
	269-270	/											
	270-271	/											
	271-272	/											
S-25	272-273	/				Tan-gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	273-274	/				Tan-gray	Silty fine-med sand.	SM					
	274-275	/											

Remarks:

 Drilling Area
 Background (ppm): 0

Converted to Well:

Yes

X

No

Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/4/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	275-276	/											
	276-277	/											
	277-278	/											
	278-279	/											
	279-280	/											
S-26	280-281	/				Tan-gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	281-282	/				Tan-gray	Silty fine-med sand.	SM					
	282-283	/											
	283-284	/											
	284-285	/											
	285-286	/											
	286-287	/											
	287-288	/					Silt and clay	ML CL	Geophysical log.				
	288-289	/											
	289-290	/											
	290-291	/											
	291-292	/											
	292-293	/											
	293-294	/											
	294-295	/											
S-27	295-296	/				Tan-gray	Silty fine-med sand.	SM	Screened mud rotary	0	0	0	0
	296-297	/				Tan-gray	tr. little, med. Quartzose gravel	SM					
	297-298	/											
	298-299	/											
	299-300	/											

Remarks:

Drilling Area
 Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/4/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	300-301	/											
	301-302	/											
	302-303	/											
	303-304	/											
	304-305	/											
	305-306	/											
	306-307	/											
	307-308	/											
S-28*	308-309	/				Tan-gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	309-310	/				Tan-gray	laminae.	SM	Resumed drilling @ 308'				
	310-311	/							11/04/2011.				
	311-312	/											
	312-313	/											
	313-314	/											
	314-315	/											
	315-316	/											
	316-317	/											
	317-318	/											
	318-319	/											
	319-320	/											
	320-321	/											
	321-322	/											
	322-323	/											
S-29*	323-324	16-24			Dense	Tan-brn	Silty very fine-fine sand, tr. silt	SM SP	Split spoon sample	0	0	0	0
	324-325	26-30				Tan-brn	laminae.	SM SP					

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/4-7/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	325-326	/											
	326-327	/											
	327-328	/											
	328-329	/											
	329-330	/											
	330-331	/											
	331-332	/											
	332-333	/							Stopped @ 333' 11/04.				
	333-334	/											
	334-335	/											
	335-336	/											
	336-337	/											
	337-338	/											
S-30*	338-339	18-20			Dense	Gray-Red brn	Silty, very fine-fine sand.	SM	Split spoon sample	0	0	0	0
	339-340	22-26											
	340-341	/											
	341-342	/											
	342-343	/											
	343-344	/											
	344-345	/											
	345-346	/											
	346-347	/											
	347-348	/											
	348-349	/											
	349-350	/											

Remarks: 11:15 - Delta onsite to run natural gammal log from GS to 350'. Drilling Area Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/7/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	350-351												
	351-352												
	352-353												
S-32*	353-354	18-24			Dense	Gray-red brn	Very fine-med sand, tr. silt	SP	Split spoon sample	0	0	0	0
	354-355	28-32											
	355-356												
	356-357												
	357-358												
	358-359												
	359-360												
	360-361												
	361-362												
	362-363												
	363-364												
	364-365												
	365-366												
	366-367												
	367-368												
	368-369												
	369-370												
	370-371												
	371-372												
	372-373												
S-33	373-374					Gray-red brn	Very fine-med sand, tr. silt	SP	Screened mud rotary	0	0	0	0
	374-375								cuttings.				

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/7/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	375-376	/											
	376-377	/											
	377-378	/											
	378-379	/											
	379-380	/											
	380-381	/											
	381-382	/											
	382-383	/											
S-34*	383-384	18-24			Very dense	Tan-gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	384-385	28-32				Tan-gray	laminae.	SM	13:15				
	385-386	/											
	386-387	/											
	387-388	/											
	388-389	/											
	389-390	/											
	390-391	/											
	391-392	/											
	392-393	/											
	393-394	/											
	394-395	/											
	395-396	/											
	396-397	/											
	397-398	/											
	398-399	/											
	399-400	/											

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW307D



PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / Hollow Stem Auger

BORING No.: BPS1-TT-MW307
 DATE: 11/7/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	400-401	/											
	401-402	/											
	402-403	/											
	403-404	/											
	404-405	/											
	405-406	/											
	406-407	/											
	407-408	/											
	408-409	/											
	409-410	/											
	410-411	/											
	411-412	/											
	412-413	/											
S-35*	413-414	22-25			Very dense	Tan-gray	Silty fine-med sand, tr. silt	SM	Split spoon sample	0	0	0	0
	414-415	27-30				Tan-gray	laminae.	SM	14:35				
	415-416	/											
	416-417	/											
	417-418	/											
	418-419	/											
	419-420	/											
	420-421	/											
	421-422	/											
	422-423	/											
S-36	423-424	16-24				Tan-gray	Silty fine-med sand, tr. silt	SM	Mud rotary cuttings.				
	424-425	26-30				Tan-gray	laminae.	SM					

Remarks: _____

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW307D

[illegible]

Drilling Area
Background (ppm): 0

Converted to Well:	Yes	X	No	Well I.D. #: BPS1-TT-MW307D
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**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Failing 110

BORING No.: BPSI-MW308\$
 DATE: 11-11-11
 GEOLOGIST: J. Birkett
 DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
						Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
		0					Tan	F sand and silt fr. gravel		Post hole digto	0	0	0	0
							Blk	F sand and silt some gravel		moist 5' bgs				
											0	0	0	0
							Blk	F-M sand some silt and gravel		moist				
1125		5									0	0	0	0
							Blk	F-C sand some silt and gravel		moist	0	0	0	0
1135		10					Blk	F-C sand some silt and ^{sm-moi} pebbles		moist	0	0	0	0
								fr. sm.-lg gravel						
1140		15												
							Blk	F-M sand some silt, sm pebbles and gravel		moist	0	0	0	0
1144		20					DK	F-M sand some silt and ^{sm-moi} pebbles		moist	0	0	0	0
							Brn	fr. sm. gravel						
		25												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: Cuttings logged, see MW308 For detailed boring log and gamma log
4 1/4 inch ID x 8 inch OD augers
Plus tack welded in lead auger, knocked out at TD

Converted to Well: Yes X No Well I.D. #: BPSI-MW308\$

Drilling Area
 Background (ppm): 0.0

**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Failing 110

BORING No.: BPSI-MW308\$
 DATE: 11-11-11
 GEOLOGIST: J. Burkett
 DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
						Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
		25					Bin	F-C sand some sm-med pebbles tr. silt and med. gravel		moist	0	0	0	0
1149		30					Bin	M-C sand some sm-med pebbles tr. silt and med. gravel		moist	0	0	0	0
1152		35					Bin	M-C sand some sm-med pebbles tr. silt and med. gravel		moist	0	0	0	0
1156		40					Org Bin	F-M sand tr. silt and sm pebbles		moist	0	0	0	0
1200		45					Org Bin	F-M sand tr. silt and sm pebbles		moist	0	0	0	0
1205		50												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: See first page

Drilling Area
 Background (ppm): 0.0

Converted to Well: Yes X No Well I.D. #: BPSI-MW308\$

**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Della
 DRILLING RIG: Failing 110

BORING No.: BPSI-MW308 \$
 DATE: 11-11-11
 GEOLOGIST: J. Birkett
 DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
						Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
1208		50					org Bgn	F-M sand tr. silt and pebbles		moist	0	0	0	0
1212		55					org Bgn	FM sand tr. silt and C. sand		moist	0	0	0	0
1216		60					org Bgn	F-M sand tr. silt and C. sand		moist	0	0	0	0
1216		64												
		65			EOB 64' bgs									

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: See first page

Drilling Area
 Background (ppm): 0.0

Converted to Well: Yes X No Well I.D. #: BPSI-MW308 \$



PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/24/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-1	0-1					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2						trace-little, med. Gravel, moist.	SM					
	2-3												
	3-4												
	4-5												
S-2	5-6					Dark Brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7						trace-little, med. Gravel, moist.	SM					
	7-8												
	8-9												
	9-10												
S-3	10-11					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12						little- med. to coarse gravel,	SM					
	12-13						moist.						
	13-14												
	14-15												
S-4	15-16					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17						little- med. to coarse gravel,	SM					
	17-18						moist.						
	18-19												
	19-20												
S-5	20-21					brn	Silty, medium-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22						little- med. to coarse gravel,	SM					
	22-23						moist.						
	23-24												
	24-25												

Remarks: Set 8" I.D. Sch. 40 steel surface casing to 25' below ground surface.
12" ID HSA borehole to 25' BGS, annular space filled with bentonite at base. Soil backfill above.

Drilling Area
 Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW308D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/25/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	25-26												
	26-27												
	27-28												
S-6	28-29					Tan- Lt. brn	Fine to coarse sand and	SP/G P	Screened mud rotary	0	0	0	0
	29-30						fine to coarse gravel, moist.	SP/G P	cuttings.				
	30-31												
	31-32												
	32-33												
	33-34												
	34-35												
	35-36												
	36-37												
	37-38												
S-7	38-39					Tan- brn	Fine to coarse sand and	SP/G P	Screened mud rotary	0	0	0	0
	39-40					Tan- brn	fine to coarse gravel, moist.	SP/G P	cuttings.				
	40-41						Sand and gravel is quartitic.						
	41-42												
	42-43												
S-8	43-44					Tan- brn	Fine to coarse sand and	SP/G P	Screened mud rotary	0	0	0	0
	44-45						fine to coarse gravel, moist.	SP/G P	cuttings.				
	45-46												
	46-47												
	47-48												
	48-49												
	49-50												

Remarks: Lost >100 gallons mud between 43' to 48'.

Drilling Area
 Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW308D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/25/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-9	50-51					Tan-brn	Fine to coarse sand and	SP/GP	Screened mud rotary	0	0	0	0
	51-52						fine to coarse gravel, moist.	SP/GP	cuttings.				
	52-53						Sand and gravel is quartz.						
S-10*	53-54	18-23	1.2		Dense	Tan-brn	Fine to coarse sand, little	SP	Split barrel sampler	0	0	0	0
	54-55	30-34	2.0				fine to coarse quartzose gravel,	SP					
	55-56						wet.						
	56-57												
	57-58												
S-11	58-59					Tan-Gray	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	59-60						sand, wet.	SM	cuttings.				
	60-61												
	61-62												
	62-63												
S-12*	63-64	12-18	1.4			Tan-Gray	Silty, micaceous, fine to coarse	SM	Split spoon sample.	0	0	0	0
	64-65	28-35	2.0				sand, trace silt laminae, wet.	SM					
	65-66												
	66-67												
	67-68								Resumed drilling 10/26.				
S-13	68-69					Tan-Gray	Silty, fine to medium sand and	SM ML	Mud rotary cuttings and	0	0	0	0
	69-70						sandy (f-m) silt.	SM ML	geophysical log.				
	70-71						Silty, Sand		Geophysical log.				
	71-72												
	72-73												
	73-74												
	74-75												

Remarks: Stopped drilling @ 68' due to broken hydraulic line. Resumed @ 68' 10/26/11.

Drilling Area
 Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW308D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/26/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-14	75-76					Tan-Gray	Silty, fine to medium sand,	SM	Screened mud rotary	0	0	0	0
	76-77						trace silt laminae, wet.	SM	cuttings.				
	77-78												
S-15	78-79					Tan - Gray	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	79-80						sand with silt laminae, trace to	SM	cuttings.				
	80-81												
	81-82												
	82-83												
S-16	83-84					Tan - O. Brn.	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	84-85					Tan - O. Brn.	sand with interbedded silt	SM	cuttings.				
	85-86					Tan - O. Brn.	laminae (O. Brn).	SM					
	86-87						Sandy silt.	SM ML	Geophysical log.				
	87-88												
	88-89												
	89-90												
S-17	90-91					Tan-Gray	Silty, fine to medium sand and	SM ML	Mud rotary cuttings				
	91-92						sandy (f-m) silt.	SM ML	and geophysical log.				
	92-93						Silty, sand.	SM	Geophysical log.				
	93-94									0	0	0	0
	94-95												
	95-96						Silty, sand.	SM	Geophysical log.				
	96-97												
	97-98												
	98-99												
	99-100												

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW308D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/26/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-18	100-101					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	101-102					Tan - Gray	fine sand with silt laminae.	SM ML	cuttings.				
	102-103												
	103-104												
	104-105												
S-19	105-106					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	106-107					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	107-108					Tan - Gray	laminae						
	108-109												
	109-110												
S-20	110-111					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	111-112					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	112-113					Tan - Gray	laminae						
	113-114												
	114-115												
S-21	115-116					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	116-117					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	117-118					Tan - Gray	laminae						
	118-119												
	119-120												
S-22	120-121					Tan - Gray	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	121-122					Tan - Gray	fine sand with interbedded silt	SM ML	cuttings.				
	122-123						laminae						
S-23	123-124					Tan - brn	Silty, micaceous, very fine to	SM ML	Screened mud rotary	0	0	0	0
	124-125					Tan - brn	f. sand, interbedded silt laminae.	SM ML	cuttings.				

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW308D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/26-27/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-24	125-126	/				Tan - brn	Silty, micaceous, very fine to	ML/S M	Screened mud rotary	0	0	0	0
	126-127	/				Tan - brn	f. sand, interbedded silt laminae.	ML/S M	cuttings.				
	127-128	/											
	128-129	/											
	129-130	/											
	130-131	/											
	131-132	/											
	132-133	/											
S-25	133-134	/				Tan-Org. brn	Silty, fine to coarse sand , inter-	SM ML	Screened mud rotary	0	0	0	0
	134-135	/				Tan-Org. brn	bedded silt laminae, tr.to little	SM ML	cuttings.				
	135-136	/				Tan-Org. brn	black organic material (lignite).						
	136-137	/											
	137-138	/											
S-26	138-139	/				Tan-Org. brn	Silty, micaceous, medium to coars	SM	Split spoon sample.	0	0	0	0
	139-140	/				Tan-Org. brn	sand with silt laminae, tr. lignite.	SM					
	140-141	/											
	141-142	/											
	142-143	/											
S-27	143-144	25-30				Gray - White	Silty, micaceous, vf to fine	SM	Split spoon sample.	0	0	0	0
	144-145	50-35				Gray - White	sand with silt laminae, tr. lignite.	SM					
	145-146	/											
	146-147	/											
	147-148	/											
	148-149	/											
	149-150	/											

Remarks: _____

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/27/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole*	Driller BZ*
	150-151												
	151-152												
	152-153												
S-28*	153-154	24-48	1.5		Dense	Tan - Gray	Silty, micaceous, very fine-med.	SM	Split spoon sample.	0	0	0	0
	154-155	51-54	2.0			Tan - Gray	sand with silt laminae, tr. oxidized	SM					
	155-156						fine gravel.						
	156-157												
	157-158												
	158-159												
	159-160												
S-29	160-161					Tan - Gray	Silty, micaceous, fine to medium	SM	Screened mud rotary	0	0	0	0
	161-162						sand with silt laminae, tr. oxidized	SM	cuttings.				
	162-163						fine gravel.						
	163-164												
	164-165												
S-30	165-166					Tan - Gray	Silty, micaceous, fine-medium sand	SM	Screened mud rotary	0	0	0	0
	166-167					Tan - Gray	w/silt laminae, tr. Oxidized f. gravel.	SM	cuttings.				
	167-168						Silt and clay	ML/CL	Geophysical log.				
	168-169												
	169-170												
S-31	170-171					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0
	171-172					Gray	silty, very fine to fine sand.	ML/S M	cuttings.				
	172-173						Silt and clay		Geophysical log.				
	173-174												
	174-175												

Remarks:

Drilling Area

Background (ppm): 0

Converted to Well:

Yes

X

No

Well I.D. #: BPS1-TT-MW308D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/27/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	175-176						Silt and clay		Geophysical log.				
	176-177												
	177-178												
	178-179												
	179-180												
S-32	180-181					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0
	181-182					Gray	silty, very fine to fine sand.	ML/S M	cuttings.				
	182-183												
	183-184												
	184-185												
	185-186												
	186-187												
	187-188												
	188-189												
	189-190												
S-33	190-191					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0
	191-192					Gray	silty, very fine to fine sand.	ML/S M	cuttings.				
	192-193												
	193-194												
	194-195												
	195-196												
	196-197												
	197-198												
	198-199						Silt and clay		Geophysical log.				
	199-200						Silt and clay		Geophysical log.				

Remarks: _____

 Drilling Area
 Background (ppm):

 Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-TT-MW308D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/27/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	200-201	/											
	201-202	/											
	202-203	/											
S-34	203-204	/				Tan - Gray	Silty, very-fine to fine sand,	SM ML	Screened mud rotary	0	0	0	0
	204-205	/				Tan - Gray	trace black silt laminae.	SM ML	cuttings.				
	205-206	/											
	206-207	/											
	207-208	/											
	208-209	/											
	209-210	/											
	210-211	/											
	211-212	/											
	212-213	/											
S-35	213-214	/				Tan - Gray	Silty, very-fine to fine sand,	SM ML	Screened mud rotary	0	0	0	0
	214-215	/				Tan - Gray	trace black silt laminae.	SM ML	cuttings.				
	215-216	/											
	216-217	/											
	217-218	/											
	218-219	/											
	219-220	/											
	220-221	/											
	221-222	/											
	222-223	/											
S-36	223-224	/				Tan - Gray	Silty, very-fine to fine sand,	SM ML	Screened mud rotary	0	0	0	0
	224-225	/					trace black silt laminae.	SM ML	cuttings.				

Remarks: _____ Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/27/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-37	225-226					Tan - Gray	Silty, very fine to fine sand	SM	Screened mud rotary	0	0	0	0
	226-227					Tan - Gray	trace to little silt laminae.	SM	cuttings.				
	227-228												
	228-229												
	229-230												
	230-231						Silt and clay		Geophysical log.				
	231-232						Silt and clay		Geophysical log.				
	232-233												
	233-234					Tan - Gray	Silty, very fine to medium sand	SM	Screened mud rotary	0	0	0	0
	234-235					Tan - Gray	trace fine to medium gravel.	SM	cuttings.				
	235-236												
	236-237												
	237-238												
	238-239												
	239-240												
S-38	240-241					Dark brn to	Clayey coarse sand, tr. to little	SC GC	Screened mud rotary	0	0	0	0
	241-242					org brn	clayey fine gravel.	SM GM	cuttings.				
	242-243												
	243-244												
	244-245												
	245-246												
	246-247												
	247-248												
	248-249												
	249-250												

Remarks: _____ Drilling Area Background (ppm): 0

Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW308
 DATE: 10/27/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-39	250-251					Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	251-252					Tan - Gray	fine sand, trace silt laminae.	SM	cuttings.				
	252-253												
	253-254												
	254-255												
	255-256												
	256-257												
	257-258												
S-40*	258-259	25-35	1.5		V. Dense	Tan - Gray	Silty, micaceous, vf to fine	SM ML	Split spoon sample.	0	0	0	0
	259-260	52-35	2.0			Tan - Gray	sand, trace silt laminae, wet.	SM ML					
	260-261												
	261-262						Clay and silt.		Geophysical log.				
	262-263								Geophysical log.				
	263-264								Geophysical log.				
	264-265								Geophysical log.				
	265-266												
	266-267												
	267-268												
	268-269												
	269-270												
	270-271												
	271-272												
	272-273												
S-41*	273-274	18-23	1.5		V. Dense	Tan - Gray	Silty, micaceous, vf to fine	SM ML	Split spoon sample.	0	0	0	0
	274-275	24-27	2.0			Tan - Gray	sand, trace silt laminae, wet.	SM ML					

Remarks: _____

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW308D

BORING LOG

PROJECT NAME:	Site 1 - Investigation
PROJECT NUMBER:	112G02230
DRILLING COMPANY:	Delta Drilling
DRILLING RIG:	Mud Rotary / HSA

BORING No.:	BPS1-TT-MW308
DATE:	10/27/2011
GEOLOGIST:	J. Ferguson
DRILLER:	B. Murphy / K. Cronin

[illegible]

Remarks:	Installed monitoring well MW-308, screen from 250' to 260'. Sandpack 245' to 262'.	Background (ppm):	0
	Bentonite pellet seal from 262 to 266. Sand backfill below 266'. Sandpack from 262' to 245'. Bentonite pellet seal 245 to 241.		
	Bentonite cement grout mixture 241' to +/- 5' BGS.		

Converted to Well:	Yes	X	No	Well I.D. #: BPS1-TT-MW308D
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**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta
 DRILLING RIG: Failing 110

BORING No.: BPS1-MW309\$
 DATE: 11-9-11
 GEOLOGIST: J. Birkett
 DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
						Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
		0					light Brn	F-M sand some silt and sm. to large gravel to		moist	0	0	0	0
										Past hole dig to 5' bgs				
		5												
1323							light Brn	F-M sand tr. silt and sm. to lrg pebbles		moist	0	0	0	0
		10												
B28							org Brn	F-M sand some sm. to med pebbles tr. C. sand and silt		moist	0	0	0	0
		15												
1333							org Brn	F-M sand tr. C. sand, silt and sm. pebbles very few large pebbles		moist	0	0	0	0
		20												
B37							light Brn	M sand and (sm to lg) gravel some silt C. sand		Moist	0	0	0	0
		25												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: Cuttings logged, See MW309D for detailed boring log and gamma logs
4 1/4" x 2' 0" augers in 5' segments
Pipe in lead auger, back welded, knocked out at TD
 Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-MW309\$

Drilling Area

Background (ppm): 0.0

**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta
 DRILLING RIG: Failing 110

BORING No.: BPSI-MW309\$
 DATE: 11-9-11
 GEOLOGIST: J. Birkett
 DRILLER: J. Gucci

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
Time 1340	25					light Brn	M-C sand and (sm. to lg) gravel		moist	0	0	0	0
									Collect 1 gallon zig lock of soil cuttings from 0-30' bgs				
	30								Composite @ 1340				
						light Brn	M-C sand and (sm. to lg) tr. silt & F. sand		moist	0	0	0	0
1344													
	35					light Brn	M-C sand and (sm. to lg) tr. silt and F. sand		moist	0	0	0	0
1348													
	40					org Brn	F-M sand some sm. gravel tr. silt		moist	0	0	0	0
1351													
	45					org Brn	F-M sand tr. sm. to med pebbles and silt		moist	0	0	0	0
1355													
	50												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: See first page for details

Drilling Area
 Background (ppm): 0.0

Converted to Well: Yes X No Well I.D. #: BPSI-MW309\$

BORING LOG

PROJECT NAME: NW1RP Bethpage
PROJECT NUMBER: 112602230
DRILLING COMPANY: Delta
DRILLING RIG: Failing 110

BORING No.: BPS1-MW309 \$
DATE: 11-9-11
GEOLOGIST: J. Birkett
DRILLER: J. Gucci

[illegible]

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: See first page for details

Drilling Area
Background (ppm): 0.0

Converted to Well: Yes ☒ No ☐ Well I.D. #: RPS1-MW309\$

**BORING LOG**

PROJECT NAME: NWIRP Bothpang
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Failing

BORING No.: BPSJ-MW309 I
 DATE: 11-7-11
 GEOLOGIST: J. Birken
 DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
						Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
1115		0					Brn	F-C sand some silt and pebbles		dry	0	0	0	0
										Post-hole digtoshs				
1125		5					Brn	F-C sand some silt and sm. to lg pebbles		moist	0	0	0	0
		10					Brn	FC sand some silt and sm. to lg pebbles		moist	0	0	0	0
1130		15					Brn	FC sand some silt and sm. to lg pebbles		moist	0	0	0	0
1135		20					Brn	F-M sand some silt tr. pebbles		moist	0	0	0	0
1140		25					Brn	F-M sand some silt tr. pebbles		moist	0	0	0	0
		25												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: Cullings logged, see MW309D for detailed logs w/ gamma Drilling Area Background (ppm): 0, 0
4 1/4" ID x 8" OD augers in 5' segments
Plugs in last auger track welded

Converted to Well: Yes X No Well I.D. #: BPSJ-MW309 I

**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112 G02230
 DRILLING COMPANY: Delta
 DRILLING RIG: Failing 110

BORING No.: BPSI-MW309 I
 DATE: 11-7-11
 GEOLOGIST: J. Birkett
 DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
						Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
1145		25				Org Brn		F-M sand some silt tr. pebbles and C. sand		moist	0	0	0	0
		30												
1150						Org Brn		M sand some silt and F sand tr. pebbles and C. sand sm. to lg		moist	0	0	0	0
		35												
1155						Org Brn		M. sand some silt and F sand tr. pebbles and C. sand sm. to lg		moist	0	0	0	0
		40												
1307						Org Brn		F-M sand tr. silt, C. sand, and small to med pebbles		moist	0	0	0	0
		45												
1310						Org Brn		F-M sand tr. silt and C. sand very few sm. pebbles		moist	0	0	0	0
		50												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: See first page
 Drilling Area
 Background (ppm): 0.0

 Converted to Well: Yes X No Well I.D. #: BPSI-MW309 I

**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Failing 110

BORING No.: BPSI-MW309I
 DATE: 11-7-11
 GEOLOGIST: J. Birkett
 DRILLER: J. Gucci

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	50												
Time 1315					Org Brn		F-M sand tr. silt and C. sand very few sm. to med. pebbles		moist	0	0	0	0
	55												
1319					Org Brn		F-M sand tr. silt and C. sand very few sm. to med. pebbles		moist	0	0	0	0
	60												
1323					Org Brn		F-M sand tr. to some sm. pebbles tr. silt and C. sand		moist to wet	0	0	0	0
									Driller notes				
	65								clay around 64' bgs in 4' thick				
1329					Org BRN		F-M sand tr. to some silt very few pebbles		wet	0	0	0	0
					light Brn		F-M sand some silt very few pebbles		wet	0	0	0	0
	70												
1333					light Brn		F-M sand some silt tr. C. sand very few pebbles		wet	0	0	0	0
	75												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: See first page
 Drilling Area
 Background (ppm): 0.0

 Converted to Well: Yes ☒ No ☐ Well I.D. #: BPSI-MW309I

**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Failing 110

BORING No.: BPSI-MW309I
 DATE: 11-7-11
 GEOLOGIST: J. Birke
 DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
						Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
1339		75					Org. light Brn	F-M sand some silt very few small pebbles		wet Drillers notes a small kick at 76'	0	0	0	0
1343		80					Org. light Brn	M-C sand some silt and F sand very few sm. pebbles		wet	0	0	0	0
1347		85					light Brn	M-C sand some silt and F sand very few sm. pebbles		wet	0	0	0	0
1352		90					light Brn	M sand some silt and F sand very few sm. pebbles		wet	0	0	0	0
1356		95					light Brn	F-M sand some silt and clay tr. C. sand and sm. pebbles		wet Sticky cuttings Filled bucket of Front end loader Driller leave to put in roll off	0	0	0	0
		100												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: See first page
 Drilling Area
 Background (ppm): 0.0

 Converted to Well: Yes X No Well I.D. #: BPSI-MW309I

**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112602230
 DRILLING COMPANY: Delta
 DRILLING RIG: Failing 110

BORING No.: BPSI-MW309I
 DATE: 11-7-11
 GEOLOGIST: J. Birkett
 DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
						Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
1409		100					light Brn	F-M sand some silt/clay tr. C. sand and sm. pebbles		wet sticky	0	0	0	0
1435		105					light Brn	F-M sand some silt/clay tr. C. sand		wet sticky	0	0	0	0
1439		110					light Brn	Silty F-M sand tr. C. sand		wet sticky	0	0	0	0
1444		115					light Brn	Silty F-M sand tr. C. sand		wet s	0	0	0	0
1451		120					light Brn	Silty F-M sand tr. C. sand		wet	0	0	0	0
		125												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: See First page
 Drilling Area
 Background (ppm): 0.0

 Converted to Well: Yes X No Well I.D. #: BPSI-MW309I

**BORING LOG**

PROJECT NAME: NW/RP Bethpage
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta
 DRILLING RIG: Failing 110

BORING No.: BPS1-MW309I
 DATE: 11-7-11 and 11-8-11
 GEOLOGIST: J. Birkett
 DRILLER: J. Gucci

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
Time 1455	125					light Brn	Silty F-M sand to c. sand		cuttings - water content increasing wet	0	0	0	0
11-7-11	130												
11-8-11						light Brn	Silty F-M sand		wet	0	0	0	0
D735													
	135												
0741						light Brn	Silty F-M sand		wet	0	0	0	0
	140												
0746						light Brn	F-M sand some silt		wet	0	0	0	0
	145												
0750						light Brn	F-M sand some silt		wet	0	0	0	0
	150												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: See First page
 Drilling Area
 Background (ppm): 0.0

 Converted to Well: Yes X No Well I.D. #: BPS1-MW309I

**BORING LOG**

PROJECT NAME: NWIRP Bethpage
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta R
 DRILLING RIG: Failing 110

BORING No.: BPSI-MW309I
 DATE: 11-8-11
 GEOLOGIST: J. Birkell
 DRILLER: J. Gucci

Time	Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
						Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
0753		150					light Bm	F-M sand some silt		wet	0	0	0	0
		155												
0758							light Bm	F-M sand some silt		wet	0	0	0	0
		160												
0803							light Bm	F-M sand some silt		wet	0	0	0	0
										unload cuttings				
		165												
0819							light Bm	F-M sand some silt, C sand		wet	0	0	0	0
		170												
					EOB 170' bgs									
		175												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: See first pageDrilling Area
Background (ppm): 0.0Converted to Well: Yes X No Well I.D. #: BPSI-MW309I



PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/11/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-1	0-1					Dark Brn	Silty, med.-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	1-2						tr.-little, med. Gravel,moist.	SM	BPS1-TT-MW309-0005				
	2-3												
	3-4												
	4-5												
S-2	5-6					Dark Brn	Silty, med.-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	6-7						tr.-little, med. Gravel,moist.	SM	BPS1-TT-MW309-0510				
	7-8												
	8-9												
	9-10												
S-3	10-11					brn.	Silty, med.-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	11-12						little- med. to coarse gravel,	SM	BPS1-TT-MW309-1015				
	12-13						moist.						
	13-14												
	14-15												
S-4	15-16					brn.	Silty, med.-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	16-17						little- med. to coarse gravel,	SM	BPS1-TT-MW309-1520				
	17-18						moist.						
	18-19												
	19-20												
S-5	20-21					brn.	Silty, med.-coarse sand,	SM	Logged auger cuttings.	0	0	0	0
	21-22						little- med. to coarse gravel,	SM	BPS1-TT-MW309-2025				
	22-23						moist.						
	23-24												
	24-25												

Remarks:

Set 8" I.D. Sch. 40 steel surface casing to 25' below ground surface.
 12" ID HSA borehole to 25' BGS, annular space filled with bentonite at base. Soil backfill above.

Drilling Area

Background (ppm): 0

Converted to Well:

Yes

X

No

Well I.D. #: BPS1-TT-MW309D

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/13/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-6	25-26					Tan- Lt. brn.	Fine to coarse sand and	SM/G M	Screened mud rotary	0	0	0	0
	26-27						fine to coarse gravel, moist.	SM/G M	cuttings.				
	27-28												
	28-29												
	29-30												
S-7	30-31					Tan- Lt. brn.	Silty, med.-coarse sand,	SM/G M	Screened mud rotary	0	0	0	0
	31-32						little- med. to coarse gravel,	SM/G M	cuttings.				
	32-33						moist.						
	33-34												
	34-35												
S-8	35-36					Tan- Lt. brn.	Silty, med.-coarse sand,	SM/G M	Screened mud rotary	0	0	0	0
	36-37						little- med. to coarse gravel,	SM/G M	cuttings.				
	37-38						moist.						
	38-39												
	39-40												
S-9	40-41					Light brn.	Silty, med.-coarse sand,	SM/G M	Screened mud rotary	0	0	0	0
	41-42						little- med. to coarse gravel,	SM/G M	cuttings.				
	42-43						moist.						
	43-44												
	44-45												
S-10	45-46					Tan	Fine-coarse sand,	SW	Screened mud rotary	0	0	0	0
	46-47						little- med. to coarse gravel,	SW	cuttings.				
	47-48						moist.						
S-11*	48-49	12-16				Tan	Silty, med.-coarse sand, wet.	SM	Split spoon sample	0	0	0	0
	49-50	18-20						SM					

Remarks: _____

Drilling Area
Background (ppm): 0Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-TT-MW309D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/13/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole*	Driller BZ*
S-12	50-51					Light brn.	Fine to coarse sand and	SM/G M	Screened mud rotary	0	0	0	0
	51-52						fine to coarse gravel, moist.	SM/G M	cuttings.				
	52-53												
	53-54												
	54-55												
S-13	55-56					Tan- Lt. brn.	Fine to coarse sand and	SP	Screened mud rotary	0	0	0	0
	56-57						fine to coarse gravel, moist.	SP	cuttings.				
	57-58												
S-14*	58-59	14-17				Tan- Org. brn.	med. to coarse sand,	SP	Split spoon sample.	0	0	0	0
	59-60	19-23					moist to wet.	SP					
	60-61												
	61-62												
	62-63												
	63-64												
S-15	64-65					Tan - brn.	Sandy (fine to med.) Silt	ML SM	Screened mud rotary	0	0	0	0
	65-66					Tan - brn.		ML SM	and geophysical log.				
	66-67					Tan - brn.		ML SM					
	67-68					Tan - brn.		ML SM					
	68-69					Tan - brn.		ML SM					
	69-70												
S-16	70-71					Tan - brn.	Micaceous, fine to coarse sand	SM	Screened mud rotary	0	0	0	0
	71-72						with silt laminae, wet.	SM	cuttings.				
	72-73												
	73-74												
	74-75												

Remarks: _____

Drilling Area
Background (ppm): 0Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-TT-MW309D

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/13/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-14	75-76					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	76-77						sand with silt laminae, tr. to	SM	cuttings.				
	77-78						little lignite						
	78-79												
	79-80												
S-15	80-81					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	81-82						sand with silt laminae, tr. to	SM	cuttings.				
	82-83						little lignite						
	83-84												
	84-85												
S-16	85-86					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	86-87						sand with silt laminae, tr. to	SM	cuttings.				
	87-88						little lignite						
	88-89												
	89-90												
S-17	90-91					Tan - Org. brn	Silty, micaceous, fine to coarse	SM	Screened mud rotary	0	0	0	0
	91-92						sand with silt laminae, tr. to	SM	cuttings.				
	92-93						little lignite						
	93-94												
	94-95												
	95-96												
	96-97												
	97-98												
	98-99												
	99-100												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

Drilling Area
 Background (ppm): 0

Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-TT-MW309D

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/ /2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-18	100-101					Tan - Org. brn	Silty, fine to med. sand	ML/S M	Screened mud rotary	0	0	0	0
	101-102						with silt laminae, tr. to	ML/S M	cuttings and geophysical				
	102-103						little lignite		log.				
	103-104												
	104-105												
	105-106												
	106-107												
	107-108												
	108-109												
	109-110												
S-19	110-111					Tan - Org. brn	Silty, micaceous, fine to coarse	ML/S M	Screened mud rotary	0	0	0	0
	111-112						sand with silt laminae, tr. to	ML/S M	cuttings.				
	112-113						little lignite						
	113-114												
	114-115												
	115-116												
	116-117												
	117-118												
	118-119												
	119-120												
S-20	120-121					Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Screened mud rotary	0	0	0	0
	121-122						sand with silt laminae, tr. to	SM	cuttings.				
	122-123						little lignite						
	123-124						Sandy (fine to med.) Silt	ML SM ML SM	Geophysical log.	0	0	0	0
	124-125												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

Drilling Area
 Background (ppm): 0

Converted to Well: Yes ☒ No ☐ Well I.D. #: BPS1-TT-MW309D

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/ /2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	125-126	/											
	126-127	/											
	127-128	/											
	128-129	/											
	129-130	/											
S-21	130-131	/				Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Screened mud rotary	0	0	0	0
	131-132	/					sand with silt laminae, tr. to	SM	cuttings.				
	132-133	/					little lignite						
	133-134	/											
	134-135	/											
	135-136	/											
	136-137	/											
	137-138	/											
S-22	138-139	15-20				Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Split spoon sample.	0	0	0	0
	139-140	15-20					sand with silt laminae, tr. lignite.	SM					
	140-141	/											
	141-142	/											
	142-143	/											
	143-144	/											
	144-145	/											
	145-146	/											
	146-147	/											
	147-148	/											
S-23	148-149	10-12				Tan - Org. brn	Silty, micaceous, med. to coarse	SM	Split spoon sample.	0	0	0	0
	149-150	15-20					sand with silt laminae, tr. lignite.	SM					

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW309D

**BORING LOG**

PROJECT NAME: Site 1 - PCB Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/ /2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	150-151												
	151-152												
	152-153												
	153-154												
	154-155												
	155-156												
	156-157												
	157-158												
	158-159												
	159-160												
S-24	160-161					Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	161-162						sand with silt laminae, tr. lignite.	SM	cuttings.				
	162-163												
	163-164												
	164-165												
	165-166												
	166-167												
	167-168												
	168-169												
	169-170												
S-25	170-171					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0
	171-172						silty, very fine to fine sand.	ML/S M	cuttings.				
	172-173												
	173-174												
	174-175												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW309D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/14/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
	175-176												
	176-177												
	177-178												
	178-179												
	179-180												
S-26	180-181					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0
	181-182						silty, very fine to fine sand.	ML/S M	cuttings.				
	182-183												
	183-184												
	184-185												
	185-186												
	186-187												
	187-188												
	188-189												
	189-190												
S-27	190-191					Gray	Silty, micaceous, sandy silt and	ML/S M	Screened mud rotary	0	0	0	0
	191-192						silty, very fine to fine sand.	ML/S M	cuttings.				
	192-193												
	193-194												
	194-195												
	195-196												
	196-197												
	197-198												
	198-199												
	199-200												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW309D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/14/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-28	200-201	/				Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	201-202	/					sand with silt laminae, tr. lignite.	SM	cuttings.				
	202-203	/											
	203-204	/											
	204-205	/											
	205-206	/											
	206-207	/											
	207-208	/											
	208-209	/											
	209-210	/											
S-29	210-211	/				Tan - Gray	Silty, micaceous, fine to med.	SM	Screened mud rotary	0	0	0	0
	211-212	/					sand with silt laminae, tr. lignite.	SM	cuttings.				
	212-213	/											
	213-214	/											
	214-215	/											
	215-216	/											
	216-217	/											
S-30	217-218	/				Dark brn.	Coarse sand and fine gravel,	SM GM	Screened mud rotary	0	0	0	0
	218-219	/				Dark brn.	little to some silt, oxidized, wet.	SM GM	cuttings.				
	219-220	/											
	220-221	/											
	221-222	/											
	222-223	/											
	223-224	/											
	224-225	/											

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

 Drilling Area
 Background (ppm): 0

 Converted to Well: Yes X No _____ Well I.D. #: BPS1-TT-MW309D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/14/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-31	225-226	/				Tan - Gray	Silty, very fine to fine sand	SM	Screened mud rotary	0	0	0	0
	226-227	/					tr. to little silt laminae.	SM	cuttings.				
	227-228	/											
	228-229	/											
	229-230	/											
	230-231	/											
	231-232	/											
	232-233	/											
	233-234	/											
	234-235	/											
	235-236	/											
	236-237	/											
	237-238	/											
	238-239	/											
	239-240	/											
S-32	240-241	/				Dark brn. to	Coarse sand and fine gravel,	SM	Screened mud rotary	0	0	0	0
	241-242	/				org. brn.	little to some silt, oxidized, wet.	SM	cuttings.				
	242-243	/											
	243-244	/											
	244-245	/											
	245-246	/											
	246-247	/											
	247-248	/											
	248-249	/											
	249-250	/											

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks:

Drilling Area
 Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW309D

**BORING LOG**

PROJECT NAME: Site 1 - Investigation
 PROJECT NUMBER: 112G02230
 DRILLING COMPANY: Delta Drilling
 DRILLING RIG: Mud Rotary / HSA

BORING No.: BPS1-TT-MW309
 DATE: 10/17/2011
 GEOLOGIST: J. Ferguson
 DRILLER: B. Murphy / K. Cronin

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
S-33	250-251	/				Tan - Gray	Silty, micaceous very fine to	SM	Screened mud rotary	0	0	0	0
	251-252	/				Tan - Gray	fine sand, tr. silt laminae.	SM	cuttings.				
	252-253	/											
	253-254	/											
	254-255	/											
	255-256	/											
	256-257	/											
	257-258	/											
	258-259	/											
	259-260	/											
	260-261	/											
	261-262	/											
	262-263	/											
	263-264	/											
S-34	264-265	/				Tan - Gray	Clayey, micaceous f.sand and	SC CL	Screened mud rotary	0	0	0	0
	265-266	/				Tan - Gray	sandy, clay.	SC CL	cuttings and geophysical				
	266-267	/							log.				
	267-268	/											
	268-269	/											
	269-270	/											
	270-271	/											
	271-272	/											
	272-273	/											
S-35*	273-274	18-23			Stiff	Dark - Gray	Sandy (fine) clay and clayey	SC CL	Split spoon sample.	0	0	0	0
	274-275	24-27				to Gray	fine sand (interbedded).	SC CL					

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: Installed 2" ID Sch 40 PVC Well Screen from 252' to 262'.
#1 Silica sandpack from 248' to 262'.
4' Bentonite pellet seal 244' to 268'. Cetco bentonite/portland cement annular seal to 10' BGS.

Drilling Area
 Background (ppm): 0

Converted to Well: Yes X No Well I.D. #: BPS1-TT-MW309D

BORING LOG

PROJECT NAME:	Site 1 - Investigation
PROJECT NUMBER:	112G02230
DRILLING COMPANY:	Delta Drilling
DRILLING RIG:	Mud Rotary / HSA

BORING No.:	BPS1-TT-MW309
DATE:	10/17/2011
GEOLOGIST:	J. Ferguson
DRILLER:	B. Murphy / K. Cronin

[illegible]

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

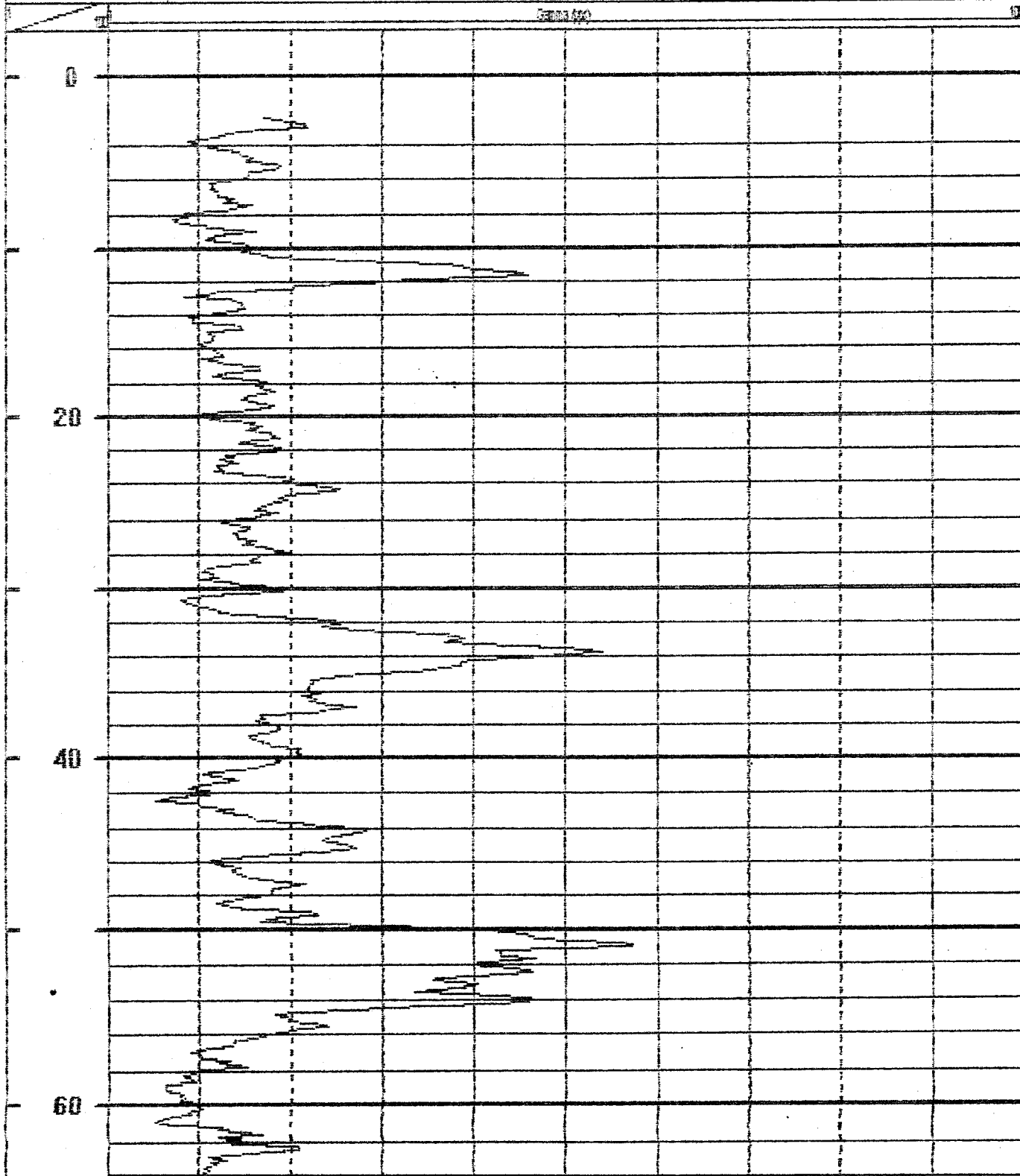
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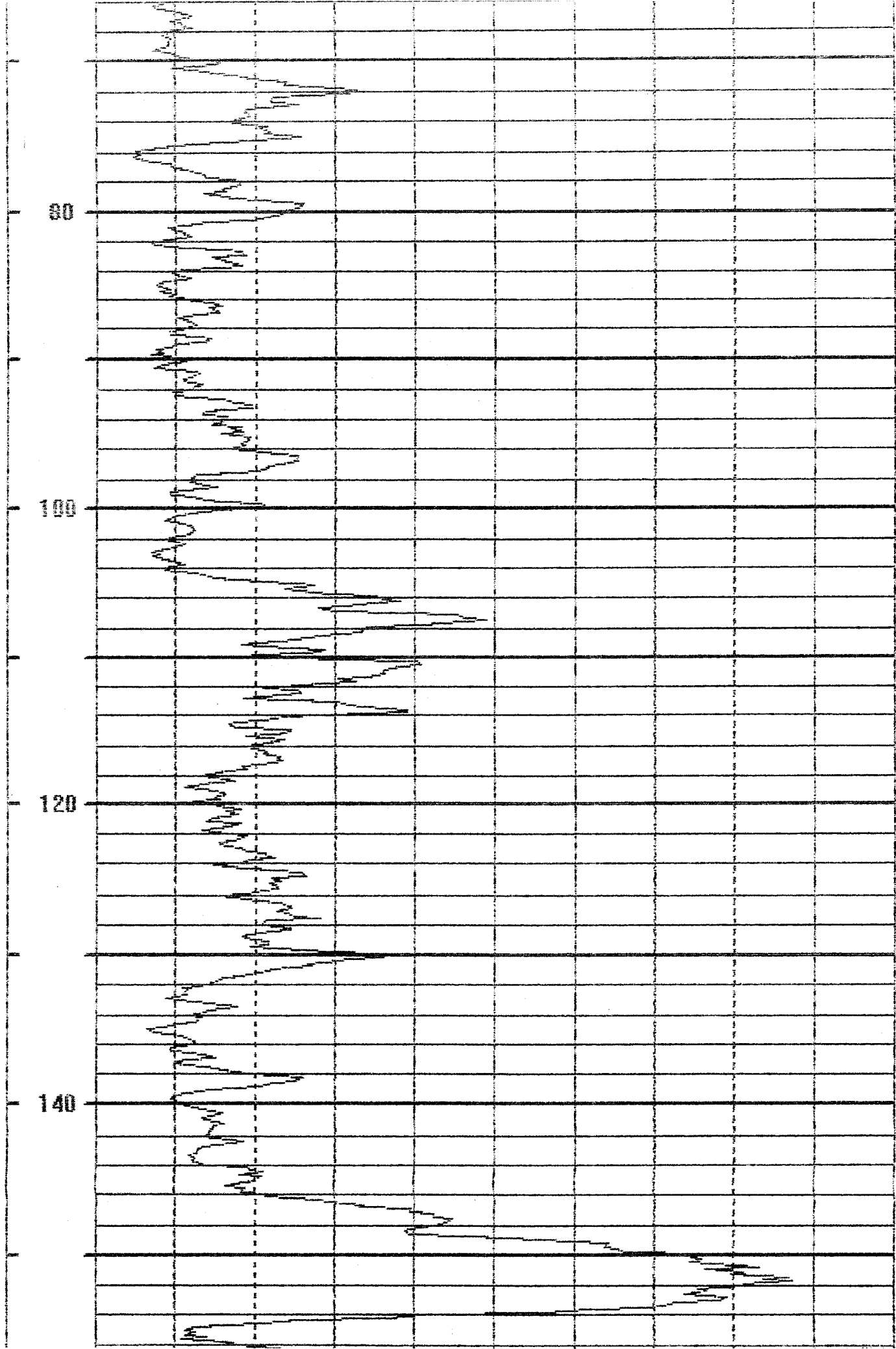
Drilling Area
Background (ppm): 0

Converted to Well:	Yes	X	No	Well I.D. #: BPS1-TT-MW309D
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Gamma Logs

COMPANY: DELTA WELL & PUMP CO., INC.		Casing
Location: MWRP BETHPAGE		
Well: BP-S1-TT-MW305	Depth Driller: _____ Depth Logger: _____	
Date: 11/17/11	EH Fluid: _____ Logged by: CRC	
File Name: 722	Witness: J. FERGUSON	





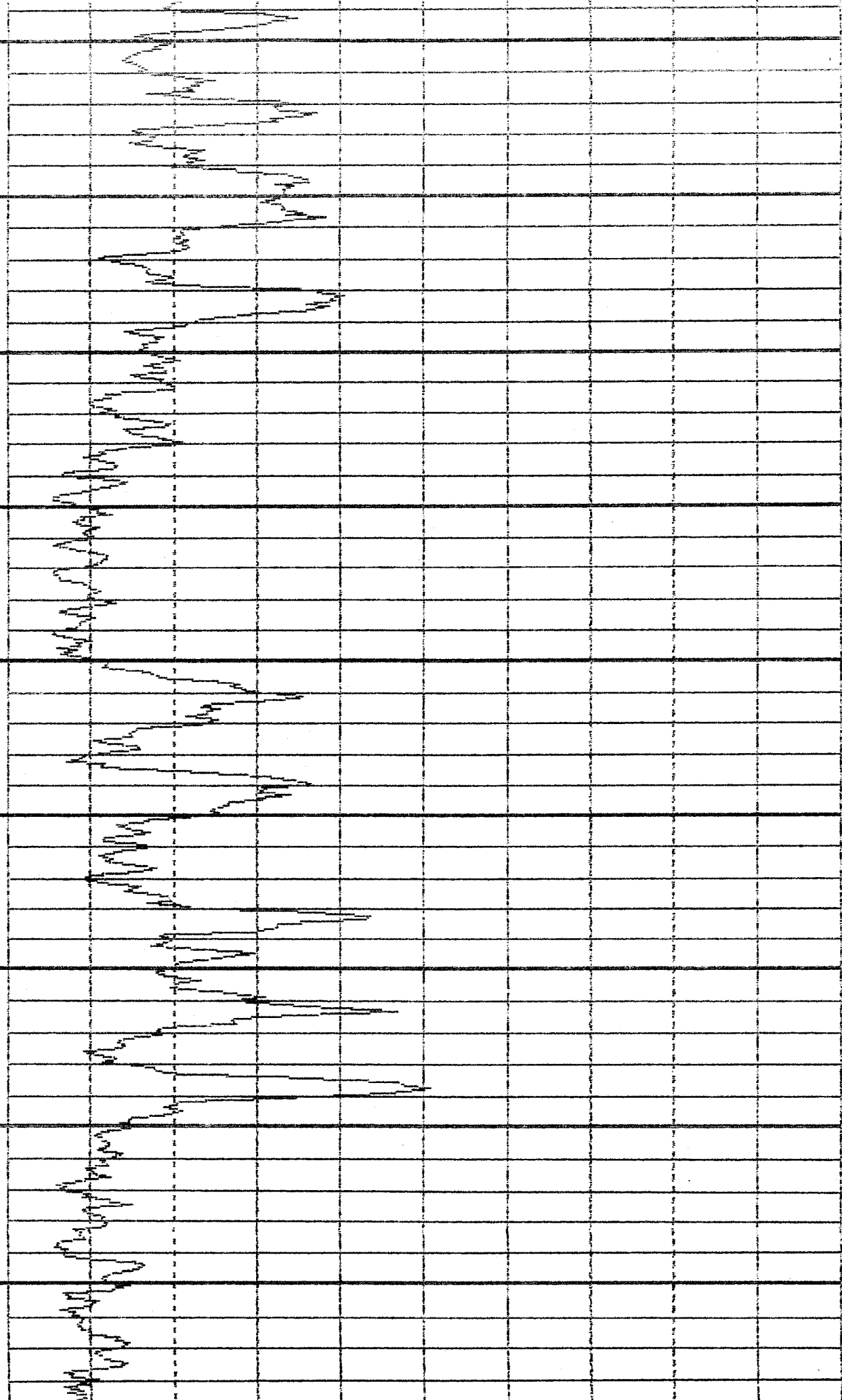
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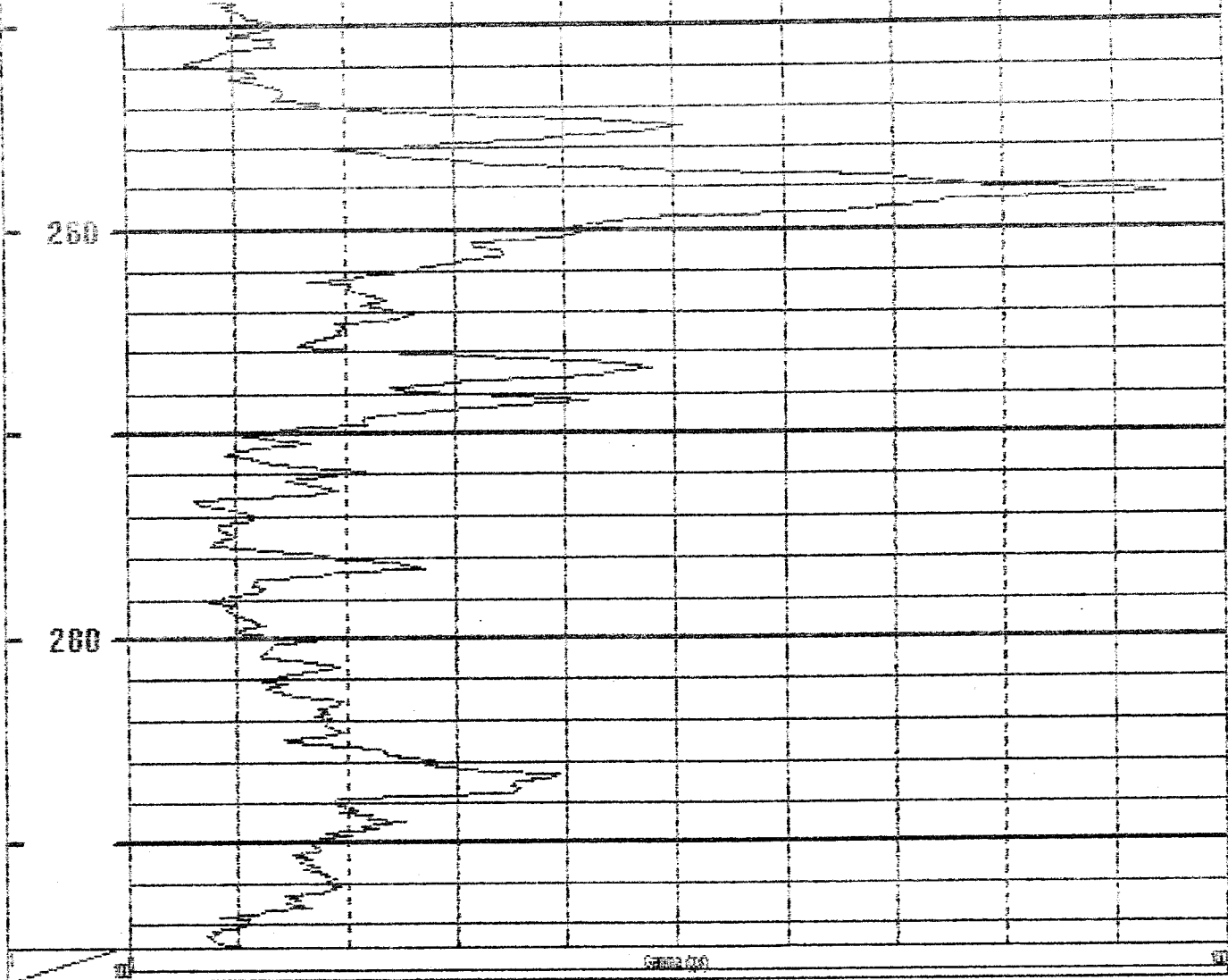
180

200

220

240





Set: Thursday, November 17, 2011 10:28:04 AM For: C:\Program Files\Autodesk\AutoCAD 2011\AutoCAD.exe

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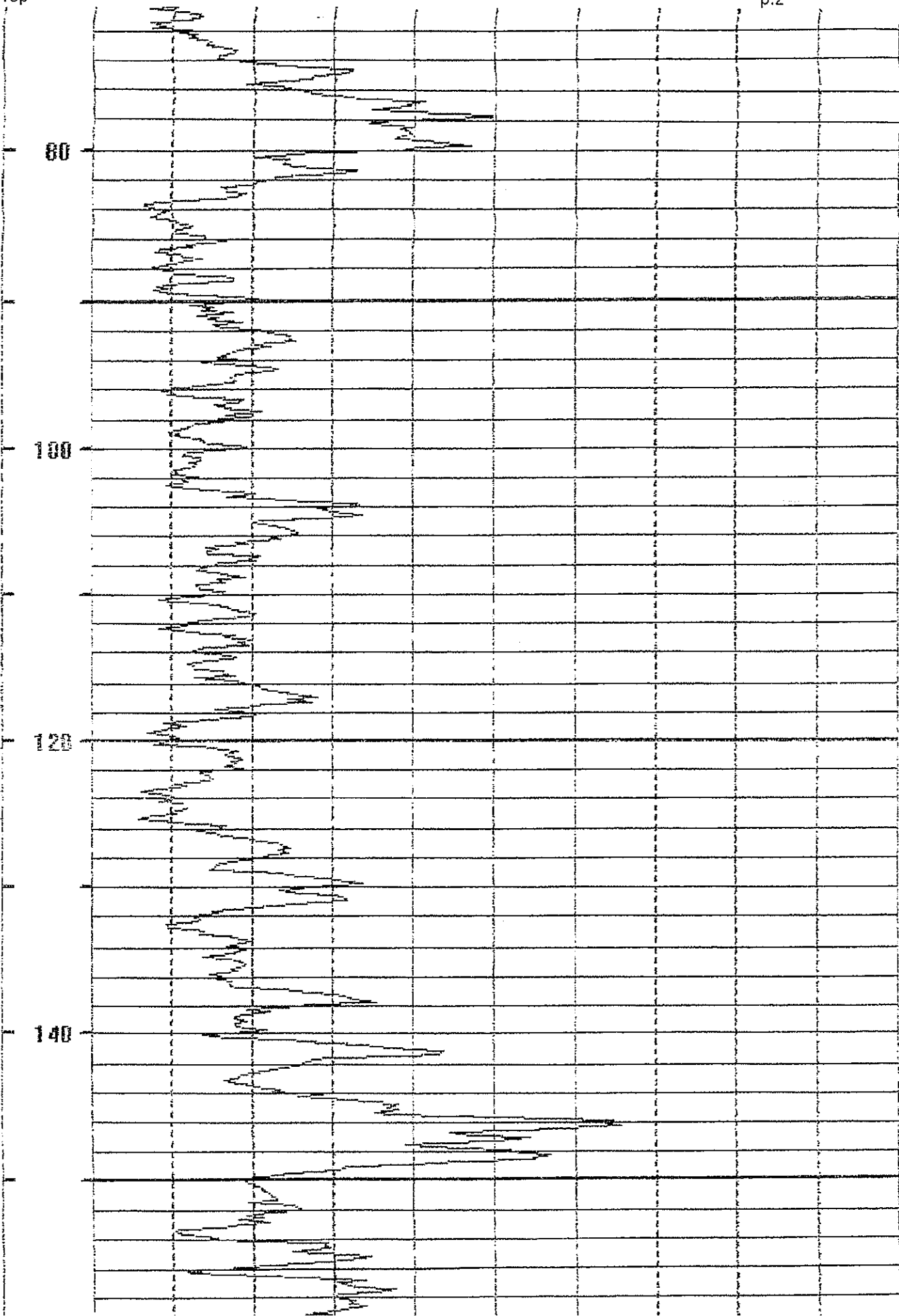
COMPANY: DELTA WELL & PUMP CO., INC.		Casing
Location: NAWRP BETHPAGE		
Well	BP-S1-TT-MW336	Depth Driller : Depth Logger :
Date	11/29/11	BH Fluid : Logged by: cmo
File Name	722	Witness: VINCE

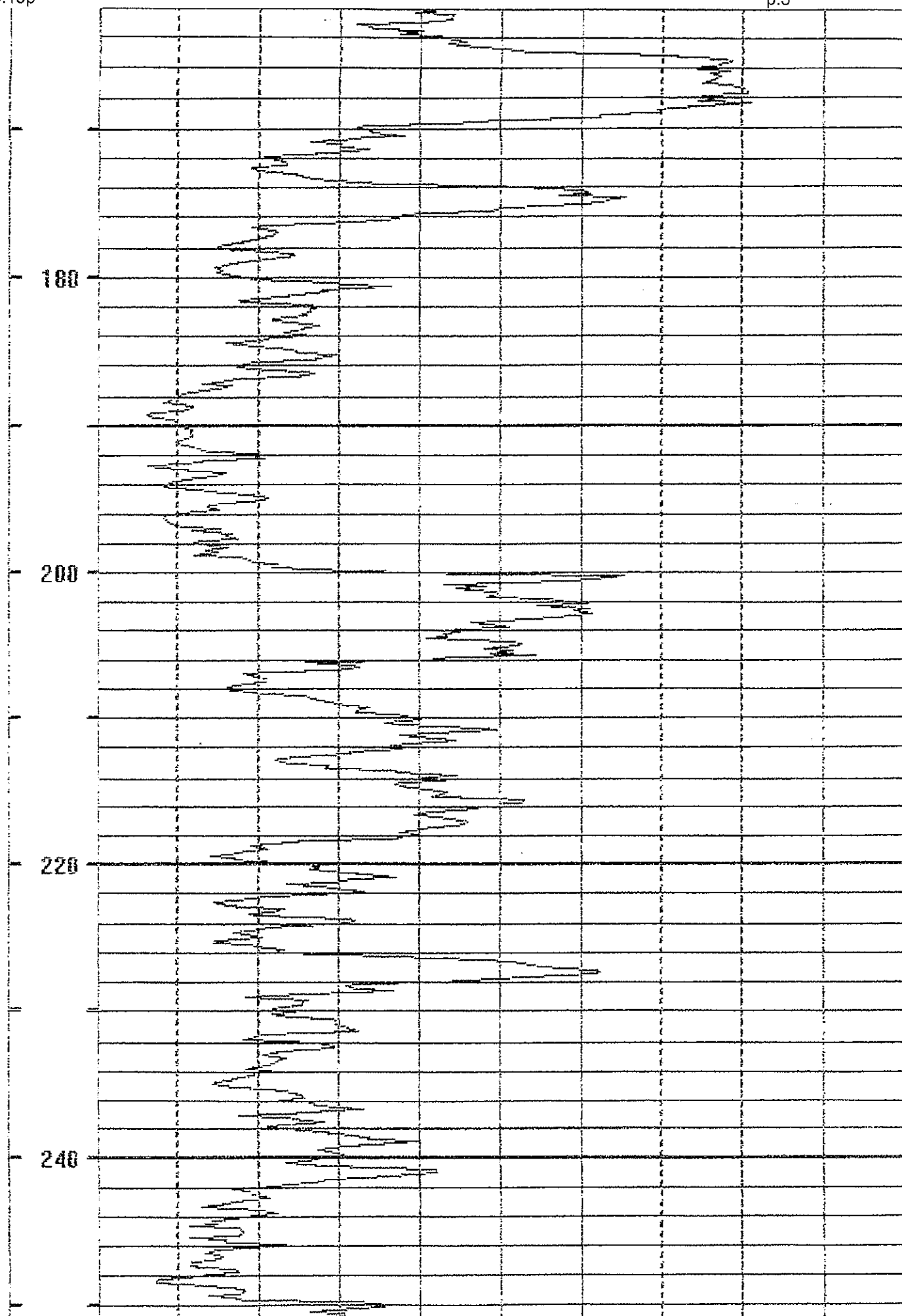
DEPTH (ft)

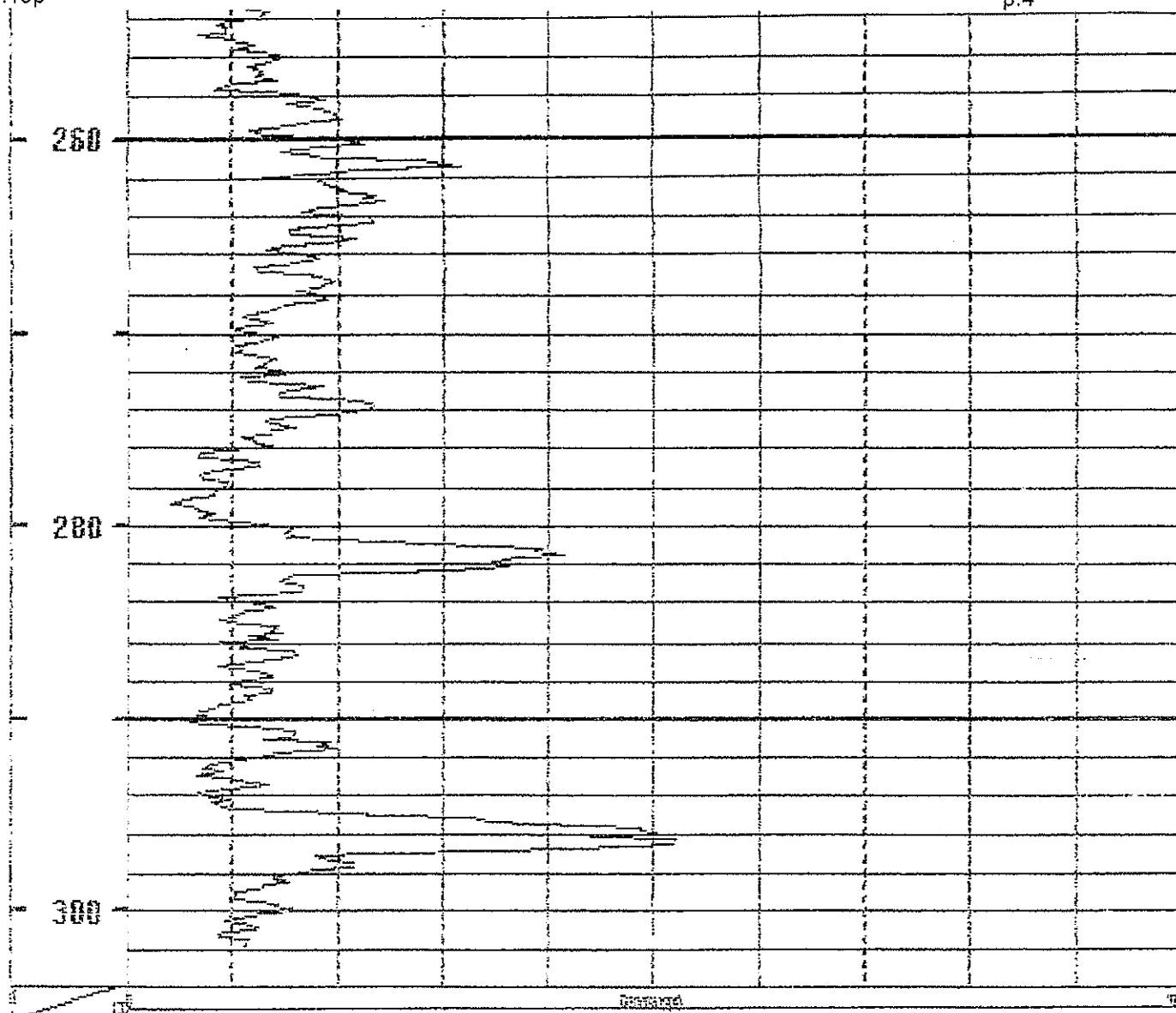
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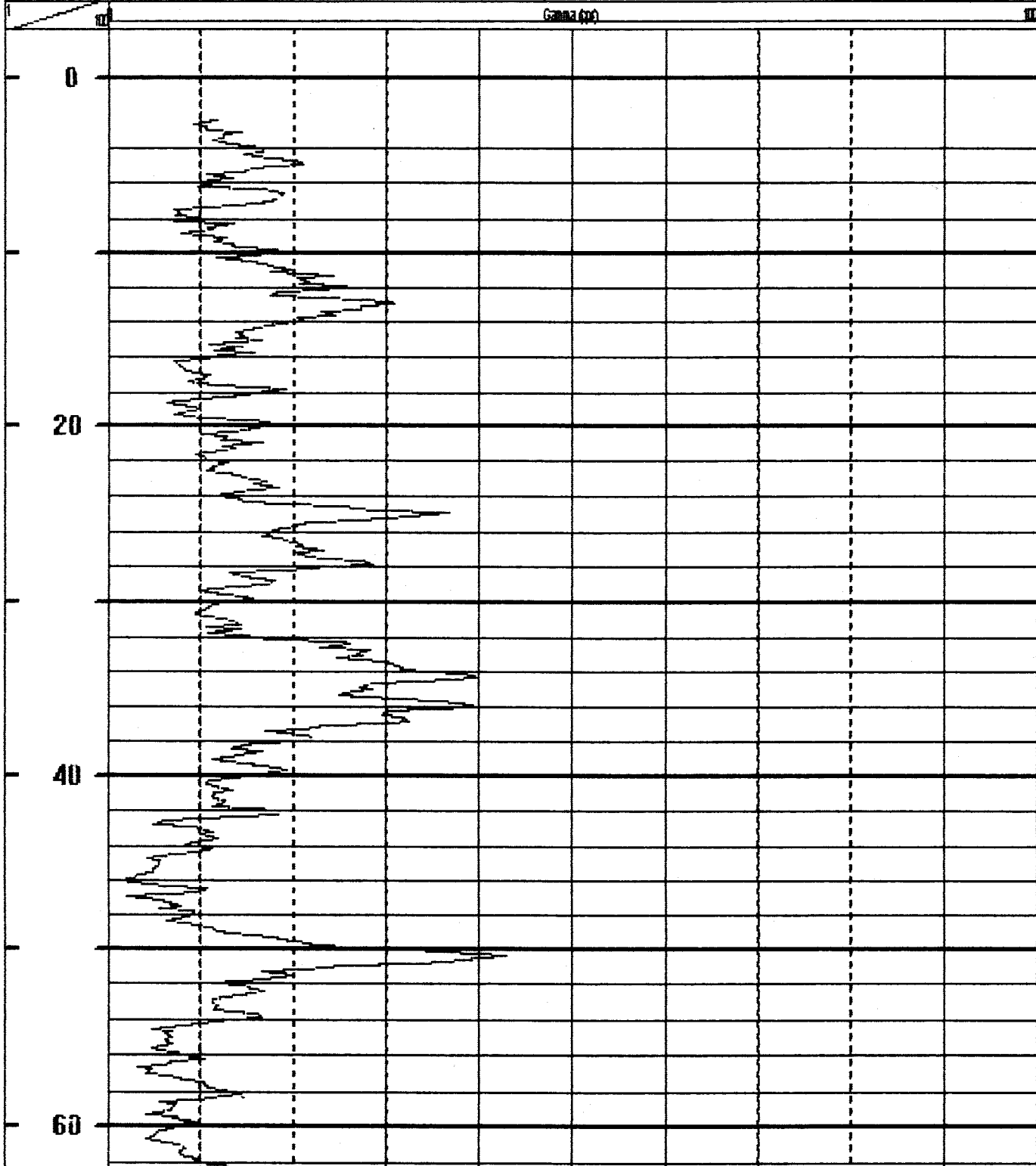
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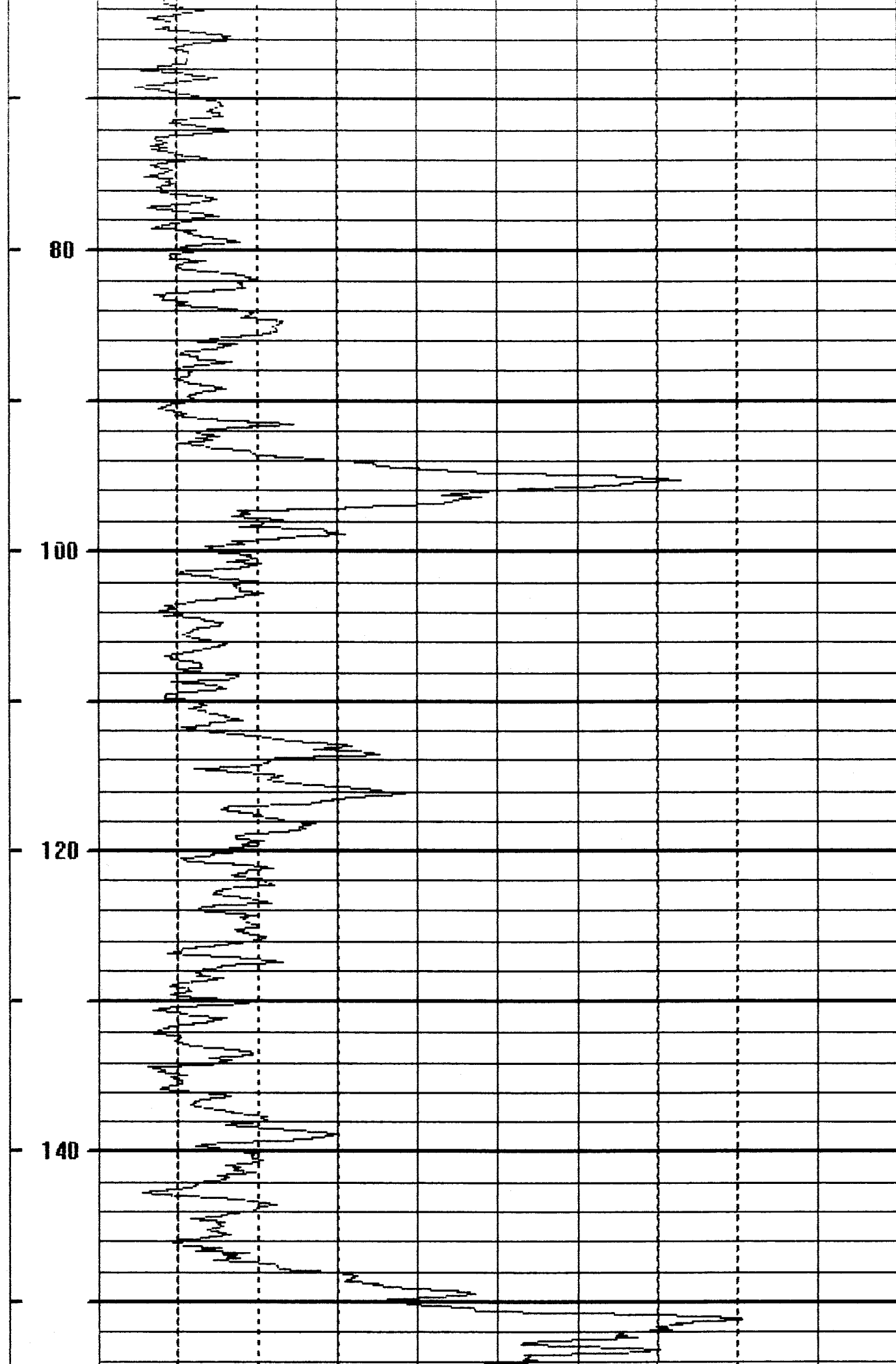


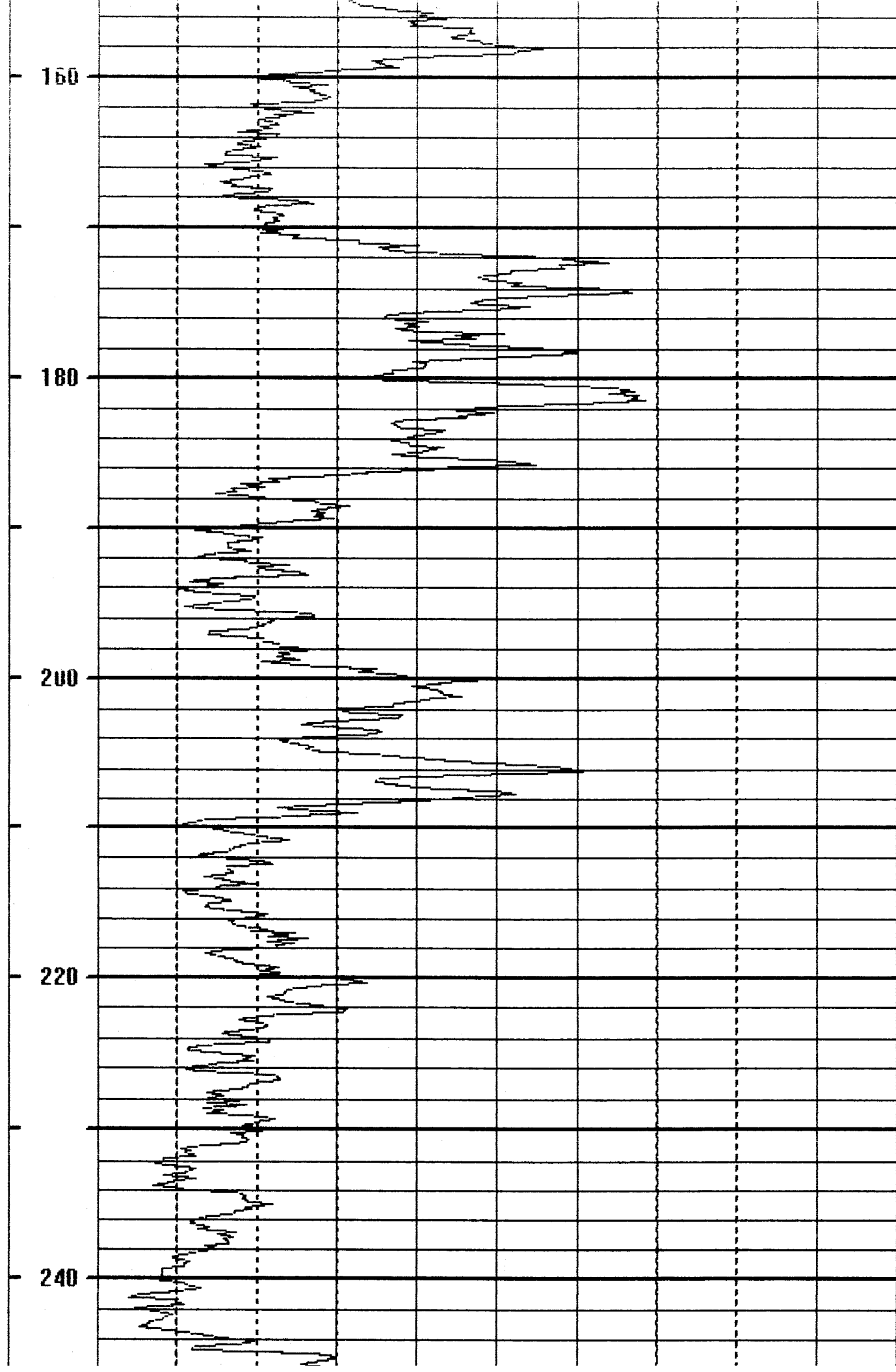


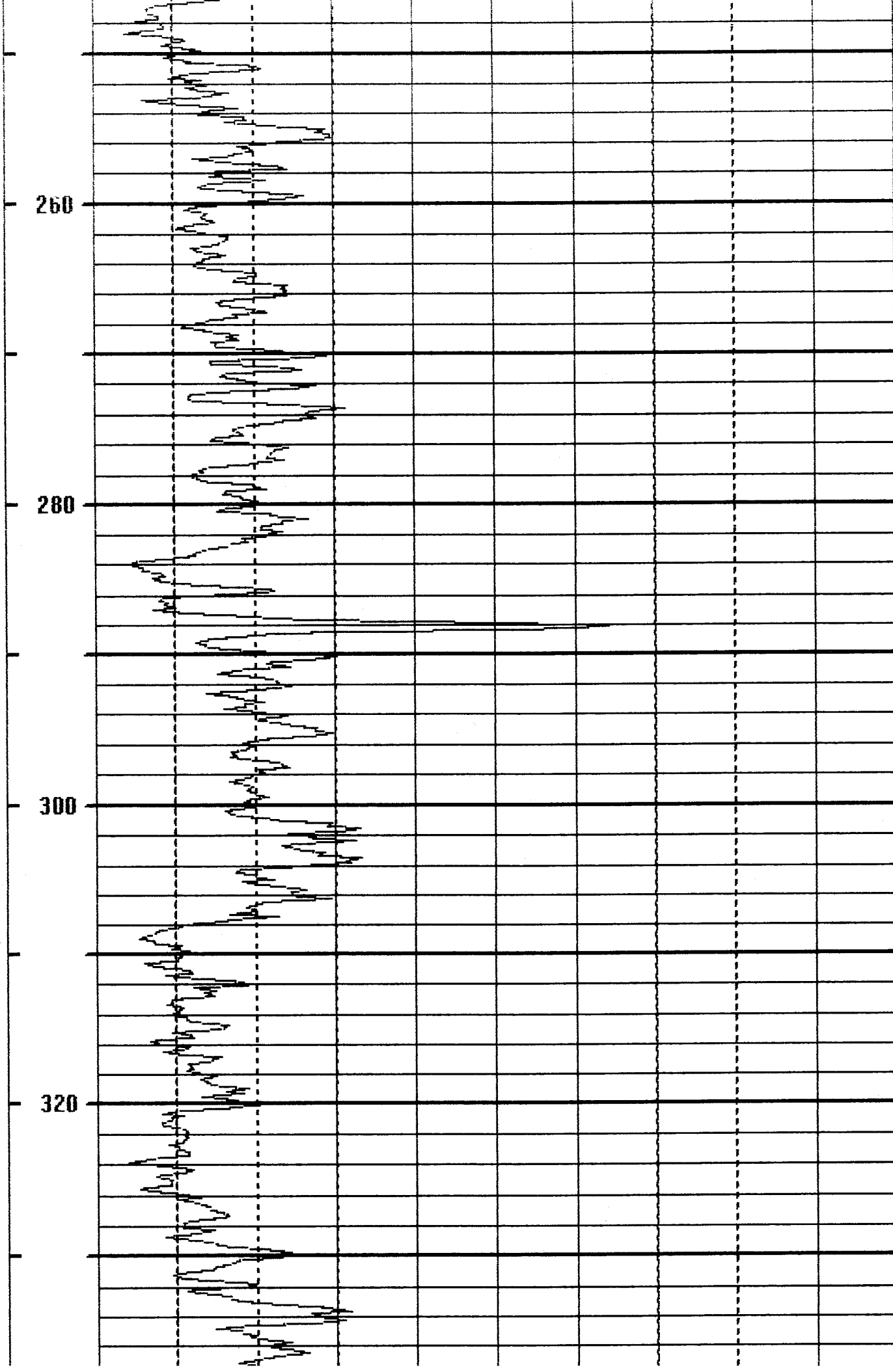


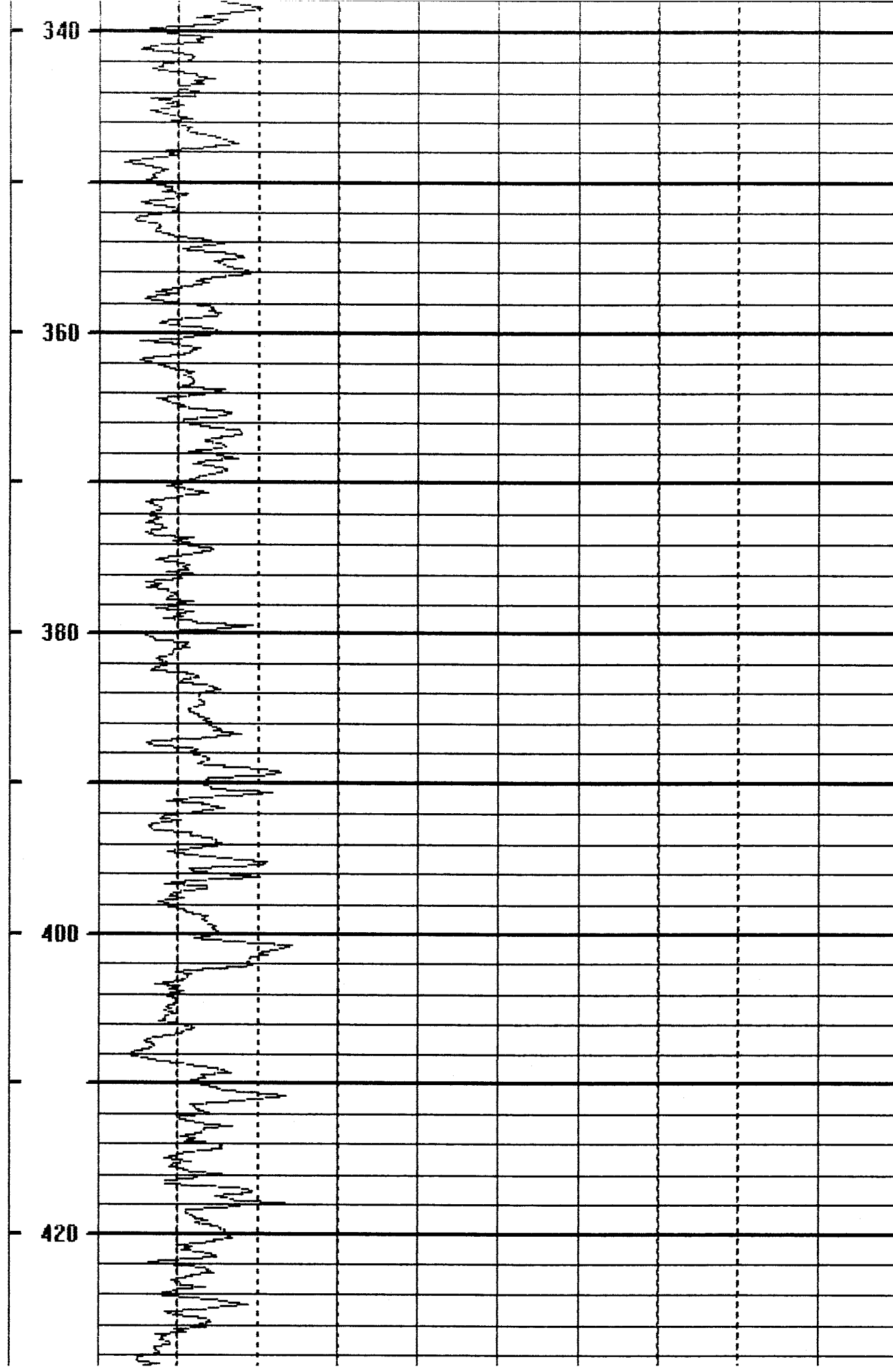
COMPANY: DELTA WELL & PUMP CO., INC.		Casing
Location: NWRP BETHPAGE		
Well	BP-S1-TT-MW307	Depth Driller
Date	11/07/11	Depth Logger
File Name	722	Logged by: orc
		Witness: J. FERGUSON

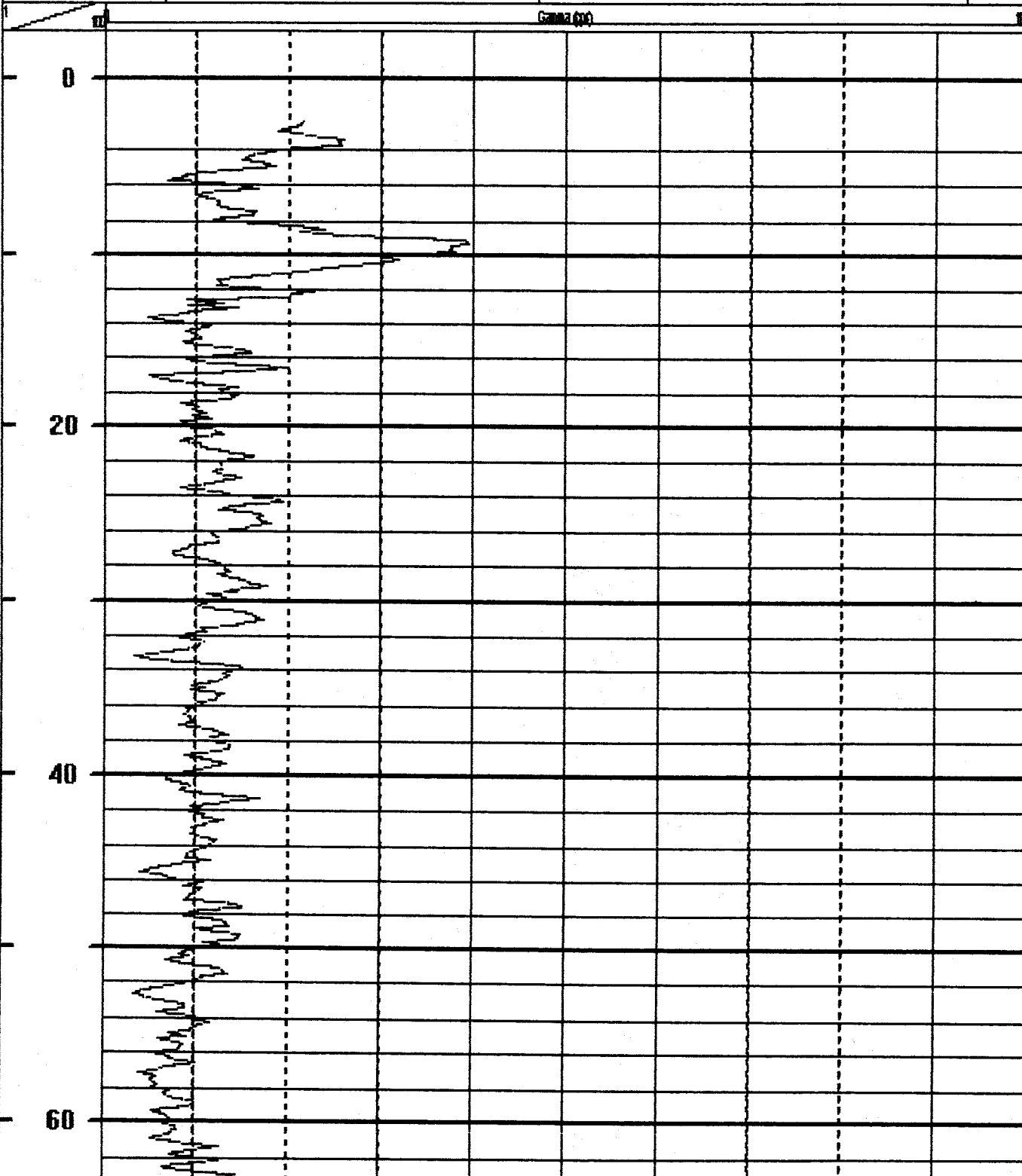


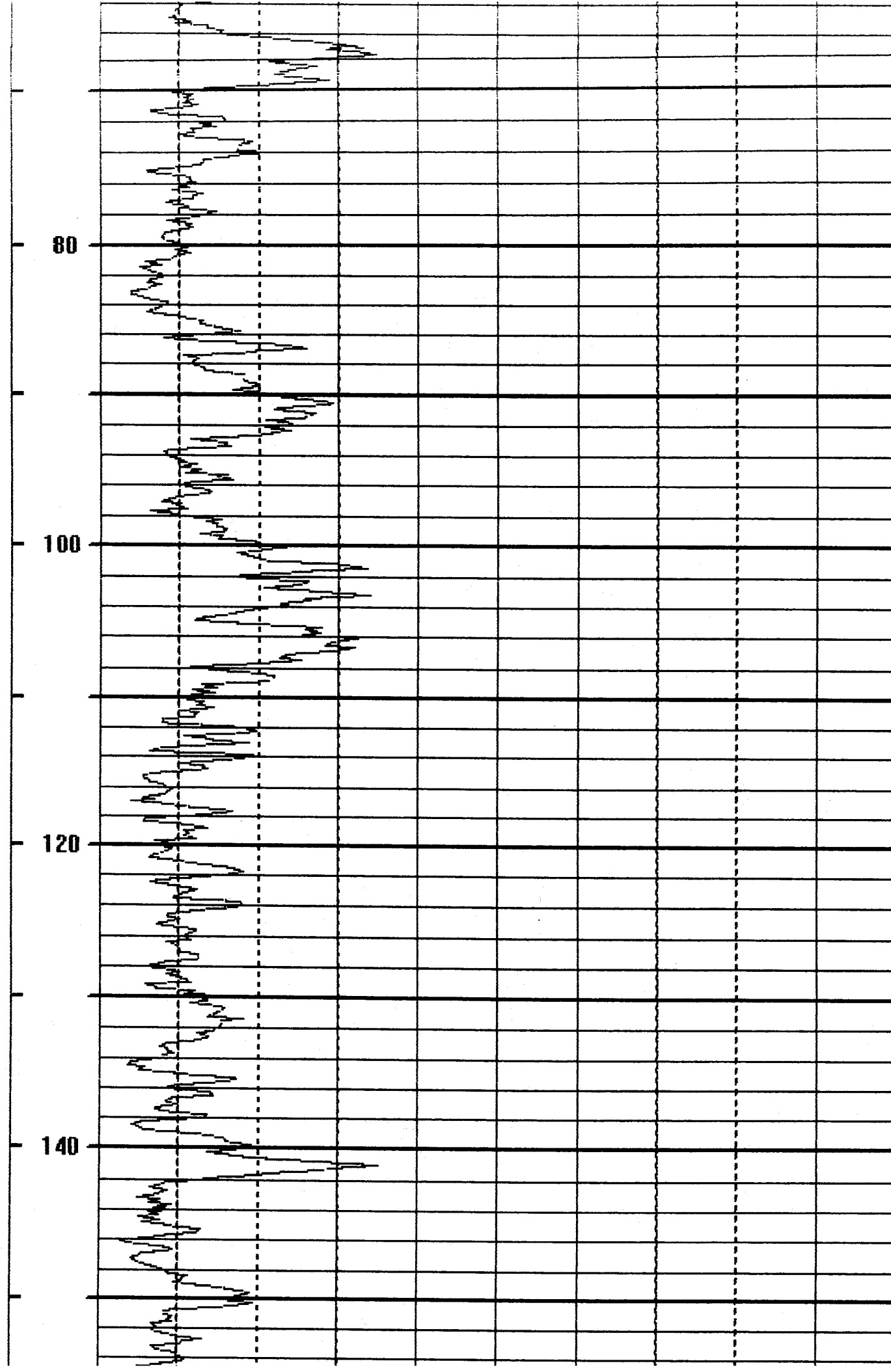


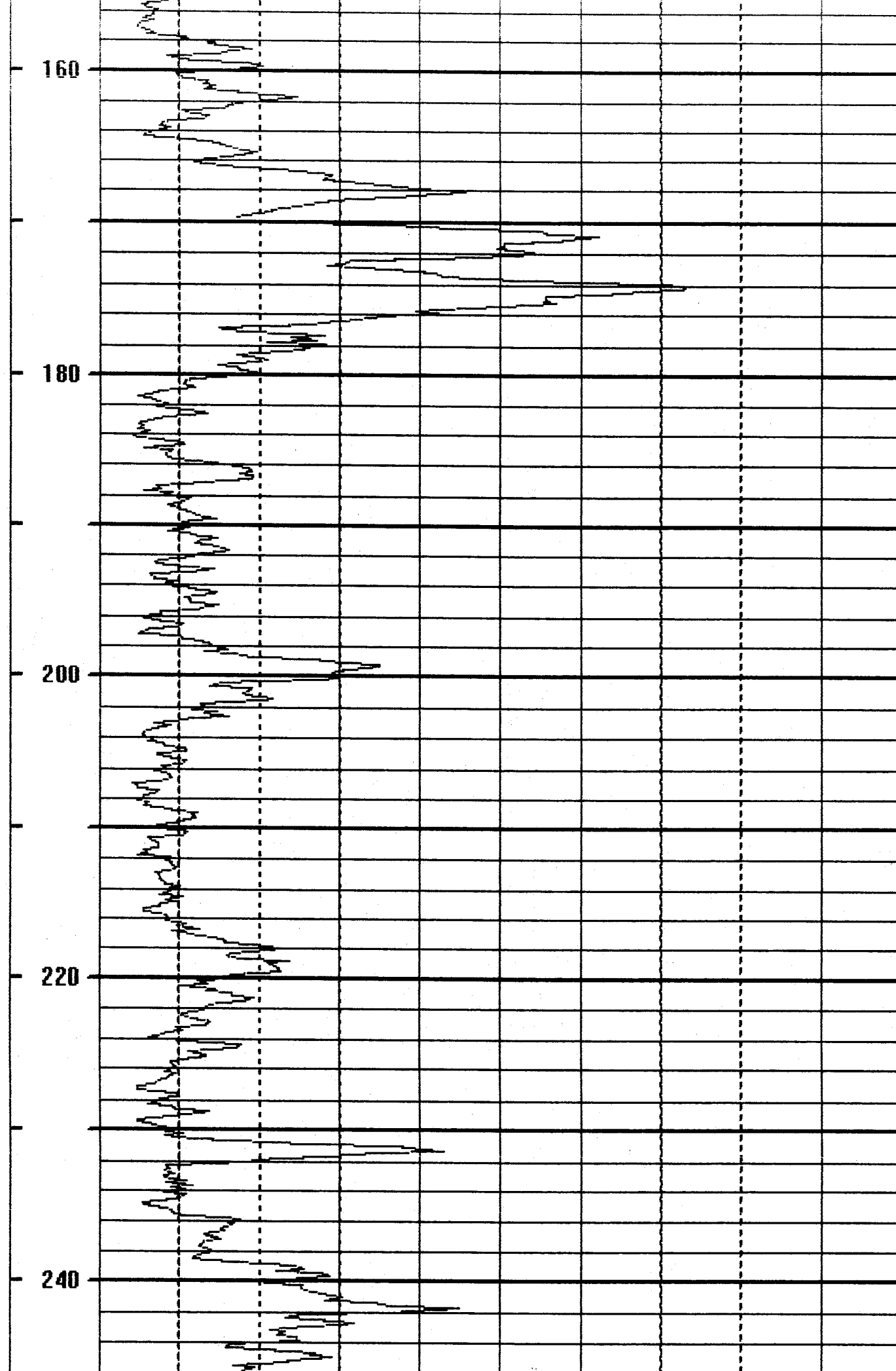


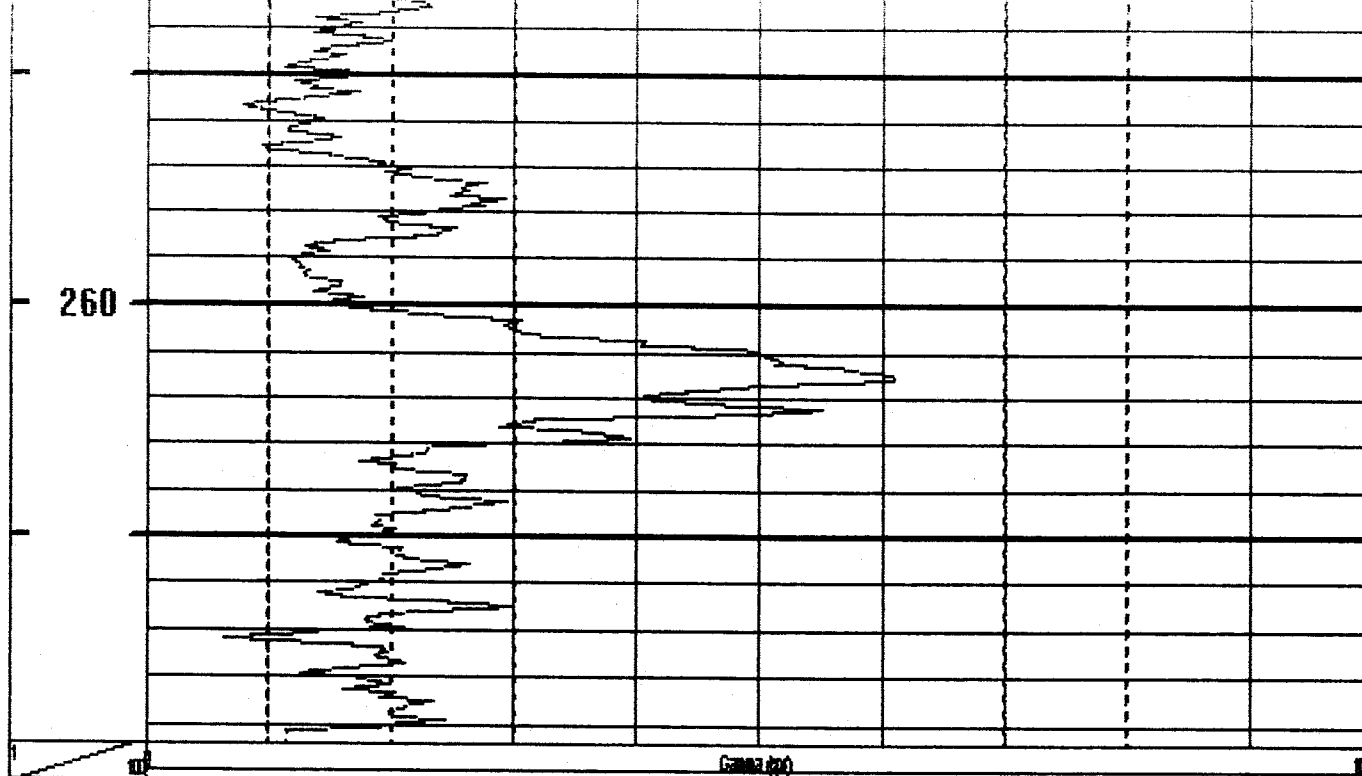






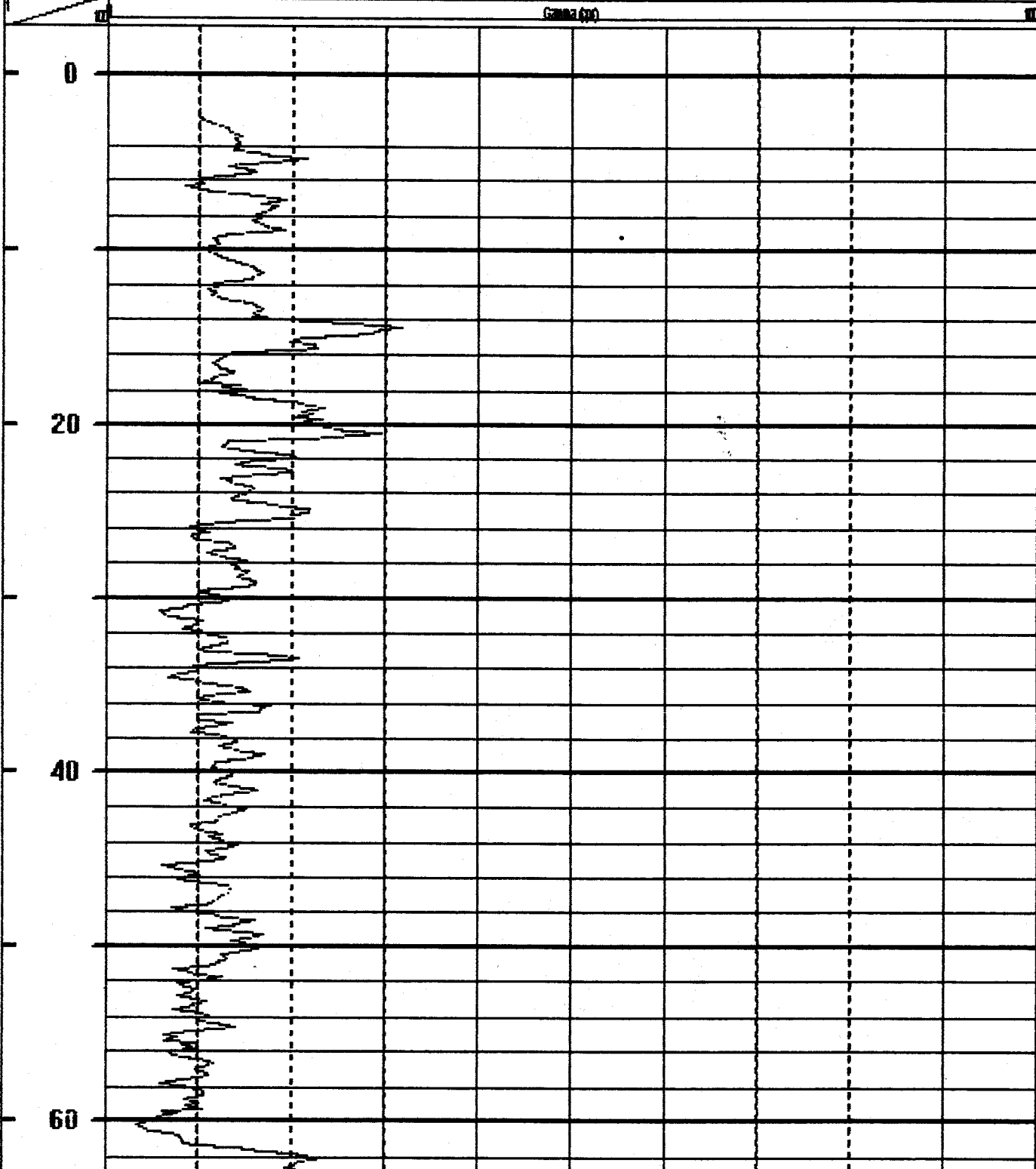


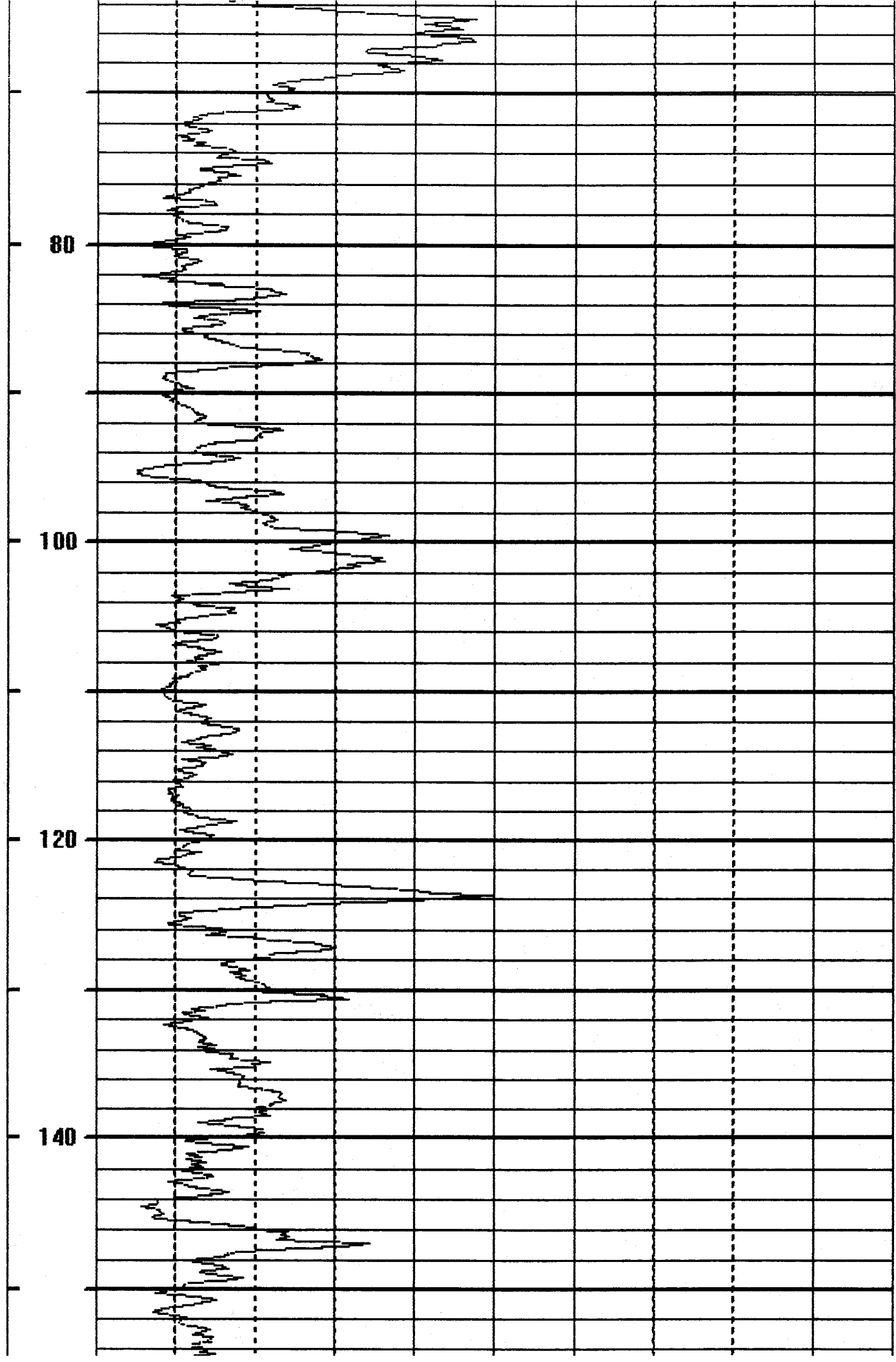


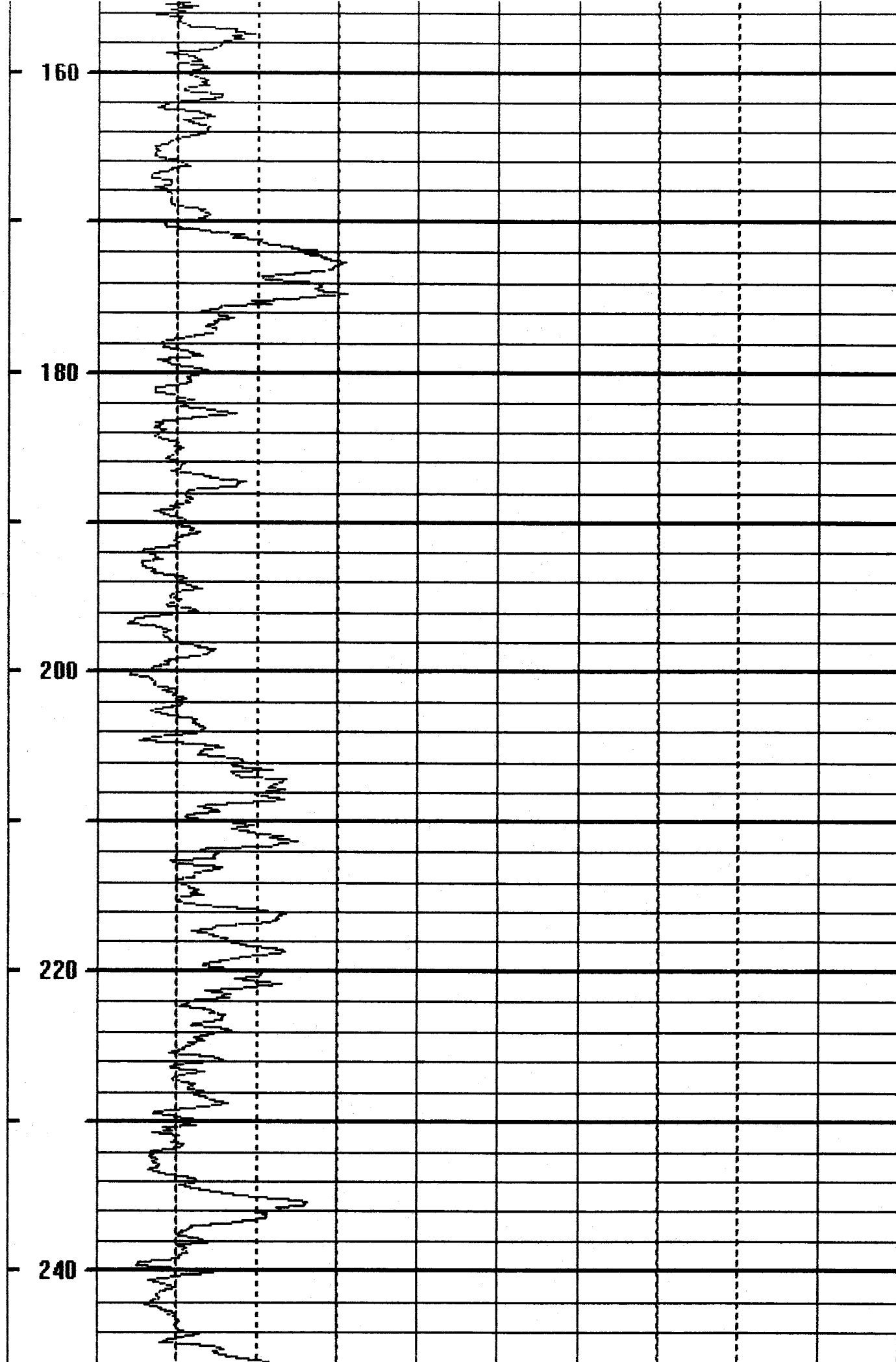


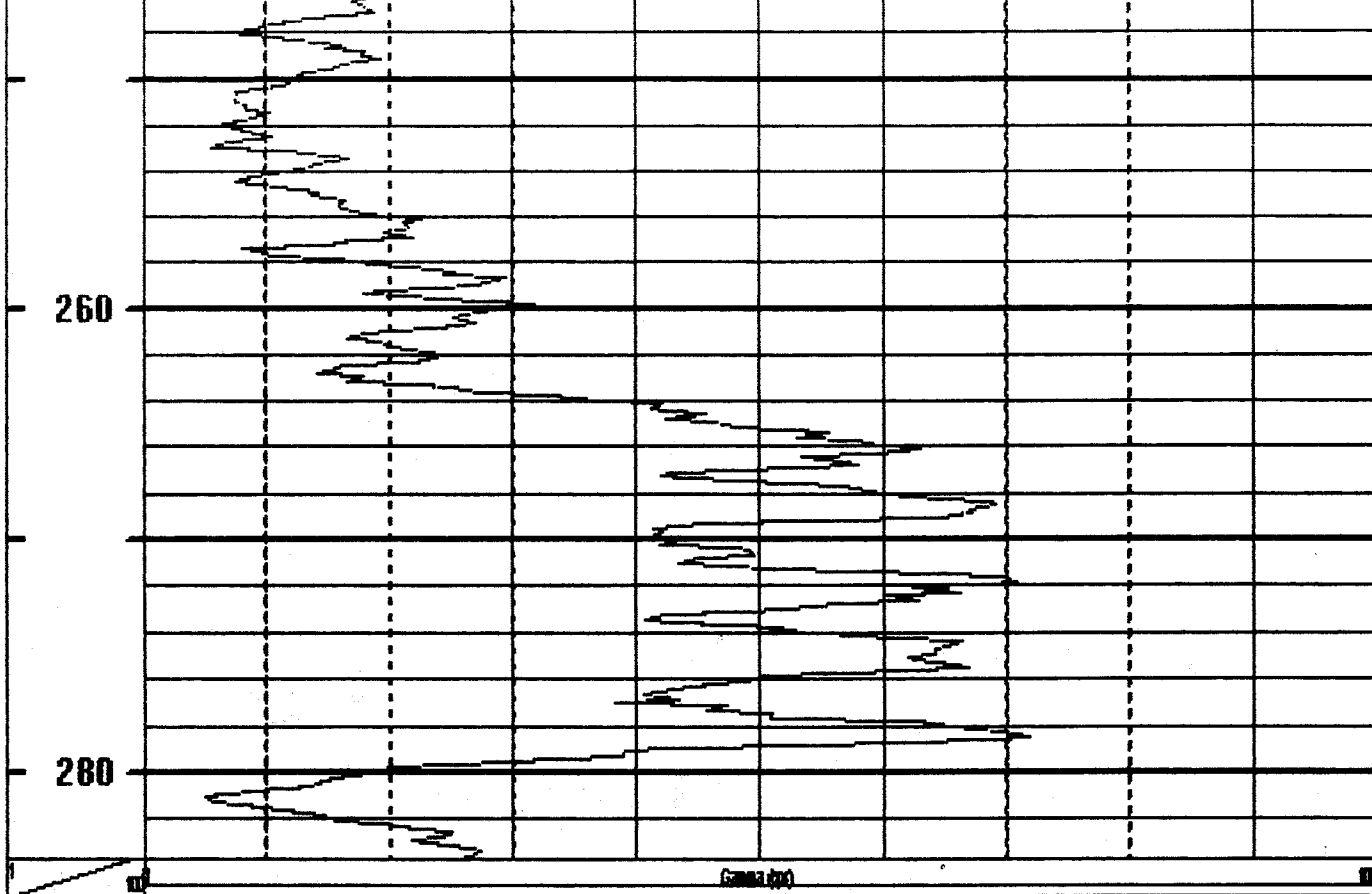
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COMPANY: DELTA WELL & PUMP CO., INC.		Casing
Location: NWRP BETPAGE		
Well	BPSI-TT-MW303	Depth Driller
		Depth Logger
Date	10/17/11	EH Fluid
		Logged by: orrc
File Name	722	Witness: J. FERGUSON









Date: Monday, October 17, 2011 Time: 12:32 File: C:\Documents and Settings\Wahid\My Documents\17172200433331.d

Monitoring Well Construction Logs



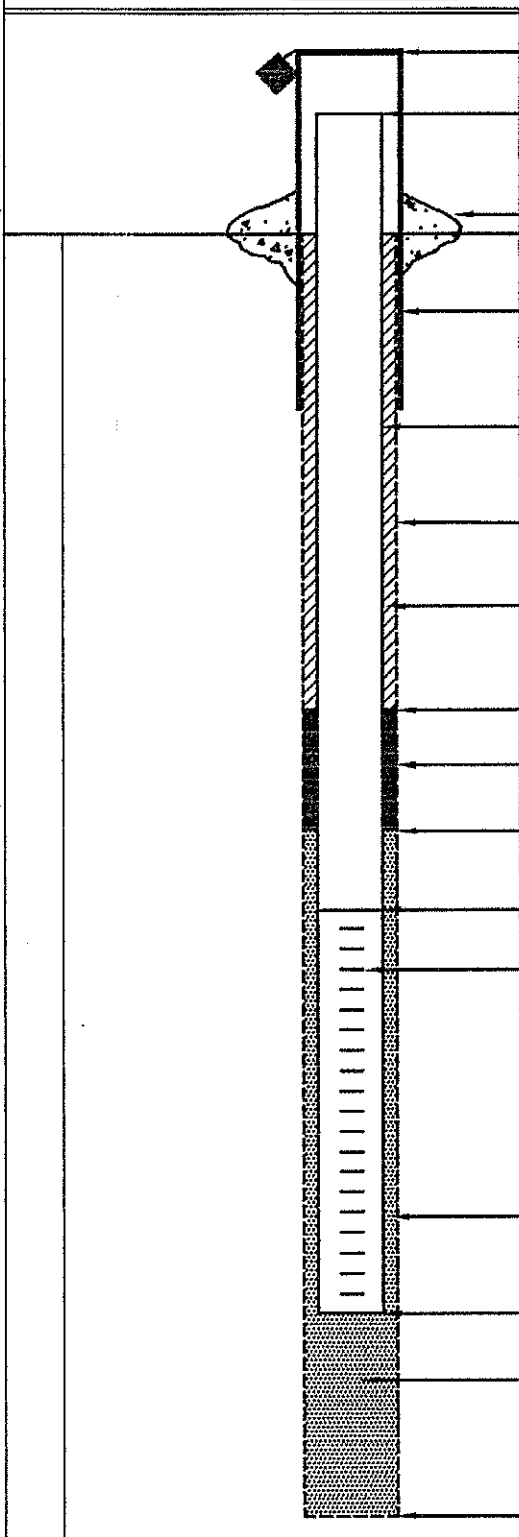
Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: MW-3055

PROJECT <u>BETHPHE SITE 1 INVESTIGATION</u>	LOCATION <u>BETHPHE New York</u>	DRILLER <u>J. GUCCI</u>
PROJECT NO. <u>112602230</u>	BORING <u>AP51-TPMW-3055</u>	DRILLING METHOD <u>Williams Steam Auger</u>
DATE BEGUN <u>November 22, 2011</u>	DATE COMPLETED <u>Nov 22 2011</u>	DEVELOPMENT METHOD
FIELD GEOLOGIST <u>J. Ferguson</u>	DATUM	
GROUND ELEVATION		

ACAD: FORM_MWSU.dwg 07/29/99 INL

	ELEVATION/HEIGHT OF TOP OF SURFACE CASING:	<u>1</u>
	ELEVATION/HEIGHT OF TOP OF RISER PIPE:	<u>1</u>
	TYPE OF SURFACE SEAL:	
	I.D. OF SURFACE CASING:	
	TYPE OF SURFACE CASING:	
	RISER PIPE I.D.:	<u>2" Ø</u>
	TYPE OF RISER PIPE:	<u>Sch. 40 PVC</u>
	BOREHOLE DIAMETER:	<u>8 1/4" Ø HSA</u>
	TYPE OF BACKFILL:	<u>LEAD (BENTONITE)</u> <u>Cement (Portland) GROUT</u>
	ELEVATION/DEPTH TOP OF SEAL:	<u>34' 1</u>
	TYPE OF SEAL:	<u>BENTONITE Pellet Seal</u>
	DEPTH TOP OF SAND PACK:	<u>38'</u>
	ELEVATION/DEPTH TOP OF SCREEN:	<u>40' 1</u>
	TYPE OF SCREEN:	<u>PVC Sch. 40</u>
SLOT SIZE x LENGTH:	<u>0.010 Slot - 10'</u>	
I.D. OF SCREEN:	<u>2"</u>	
TYPE OF SAND PACK:	<u>#1 SILICA SAND</u>	
ELEVATION/DEPTH BOTTOM OF SCREEN:	<u>50' 1</u>	
ELEVATION/DEPTH BOTTOM OF SAND PACK:	<u>1</u>	
BACKFILL MATERIAL BELOW SAND:		
ELEVATION/DEPTH OF HOLE:	<u>50' 1</u>	



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: MW-305 I

PROJECT <u>NWIRP Bethpage</u>	LOCATION <u>Site 1</u>	DRILLER <u>Jason Greco</u>
PROJECT NO. <u>11260 2230</u>	BORING <u>MW-305 I</u>	DRILLING METHOD <u>HSA</u>
DATE BEGUN <u>11-28-11</u>	DATE COMPLETED <u>11-29-11</u>	DEVELOPMENT METHOD _____
FIELD GEOLOGIST <u>Vince Shickora</u>		
GROUND ELEVATION _____	DATUM _____	

ACAD:FORM_MWSU.dwg 07/20/99 INL

	ELEVATION/HEIGHT OF TOP OF SURFACE CASING: _____ /
	ELEVATION/HEIGHT OF TOP OF RISER PIPE: _____ /
	TYPE OF SURFACE SEAL: _____
	I.D. OF SURFACE CASING: _____
	TYPE OF SURFACE CASING: _____
	RISER PIPE I.D.: <u>2 inch</u>
	TYPE OF RISER PIPE: <u>Schedule 40 PVC</u>
	BOREHOLE DIAMETER: <u>8 inch</u>
	TYPE OF BACKFILL: <u>Bentonite/Cement Grout</u>
	<u>Ceter High Solids bentonite / Portland Cement</u>
	ELEVATION/DEPTH TOP OF SEAL: _____ <u>1181'</u>
	TYPE OF SEAL: <u>3/8" Bentonite Holeplug</u>
	DEPTH TOP OF SAND PACK: _____ <u>185'</u>
	ELEVATION/DEPTH TOP OF SCREEN: _____ <u>1190'</u>
TYPE OF SCREEN: <u>schedule 40 PVC</u>	
SLOT SIZE x LENGTH: <u>0.01" x 10'</u>	
I.D. OF SCREEN: <u>2 inch</u>	
TYPE OF SAND PACK: <u>#1 Silica Quartz</u>	
ELEVATION/DEPTH BOTTOM OF SCREEN: _____ <u>1200'</u>	
ELEVATION/DEPTH BOTTOM OF SAND PACK: _____ <u>1200'</u>	
BACKFILL MATERIAL BELOW SAND: <u>Natural Formation material</u>	
ELEVATION/DEPTH OF HOLE: _____ <u>1200'</u>	



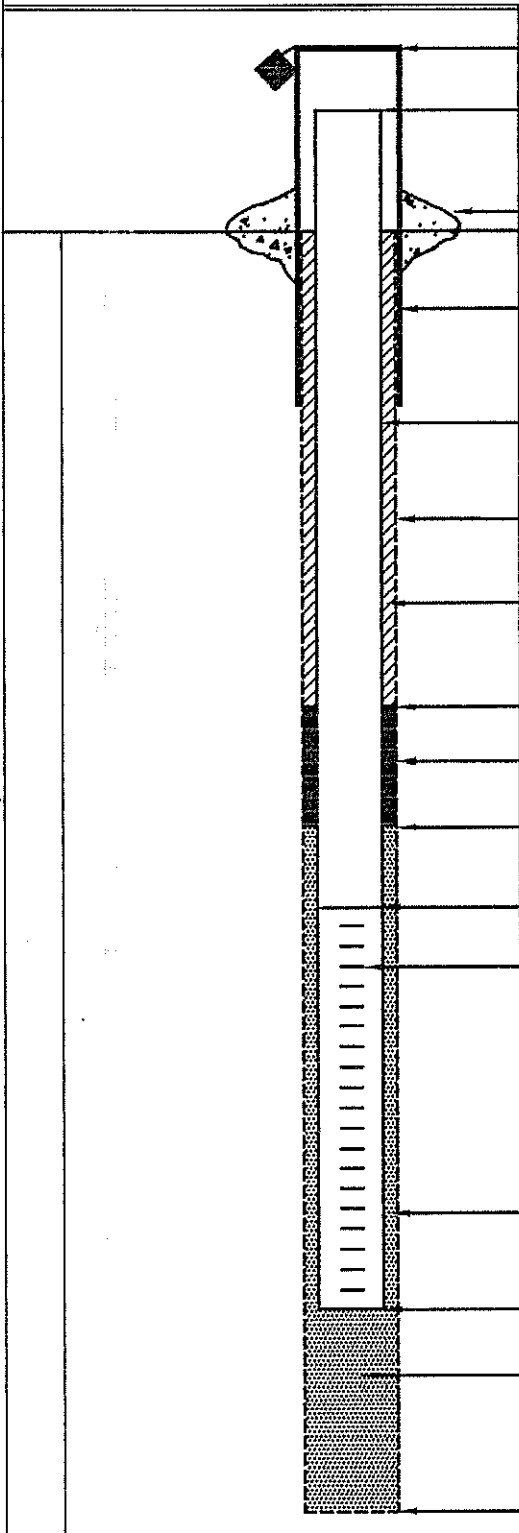
Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: MW-305D

PROJECT <u>112602230</u>	LOCATION <u>BETHPHE New York</u>	DRILLER <u>MURPHY</u>
PROJECT NO. <u>BETHPHE SITE 1 ENVEST.</u>	BORING <u>BPS1- TT-MW305D</u>	DRILLING METHOD <u>8" ϕ MUD Rotary</u>
DATE BEGUN <u>November 17, 2011</u>	DATE COMPLETED <u>November 21, 2011</u>	DEVELOPMENT METHOD
FIELD GEOLOGIST <u>J. Engstrom</u>	DATUM	
GROUND ELEVATION		

ACAD: FORM_MWSU.dwg 07/28/99 INL

	ELEVATION/HEIGHT OF TOP OF SURFACE CASING:	<u>1</u>
	ELEVATION/HEIGHT OF TOP OF RISER PIPE:	<u>1</u>
	TYPE OF SURFACE SEAL:	
	I.D. OF SURFACE CASING:	
	TYPE OF SURFACE CASING:	
	RISER PIPE I.D.:	<u>2"</u>
	TYPE OF RISER PIPE:	<u>5CH 40 PVC</u>
	BOREHOLE DIAMETER:	<u>8" ϕ</u>
	TYPE OF BACKFILL:	<u>Geo High Solids Bentonite Cement (Portland) grout</u>
	ELEVATION/DEPTH TOP OF SEAL:	<u>2' 1</u>
	TYPE OF SEAL:	<u>Geo High Solids Bentonite Cement grout</u>
	DEPTH TOP OF SAND PACK:	<u>263</u>
	ELEVATION/DEPTH TOP OF SCREEN:	<u>286' 1</u>
	TYPE OF SCREEN:	<u>5CH 40 PVC</u>
SLOT SIZE x LENGTH:	<u>0.010 slot - 10'</u>	
I.D. OF SCREEN:	<u>2" ϕ</u>	
TYPE OF SAND PACK:	<u>#1 Sand pack (270'-300') #00 Sand pack (263'-270')</u>	
ELEVATION/DEPTH BOTTOM OF SCREEN:	<u>296' 1</u>	
ELEVATION/DEPTH BOTTOM OF SAND PACK:	<u>300' 1</u>	
BACKFILL MATERIAL BELOW SAND:		
ELEVATION/DEPTH OF HOLE:	<u>300' 1</u>	



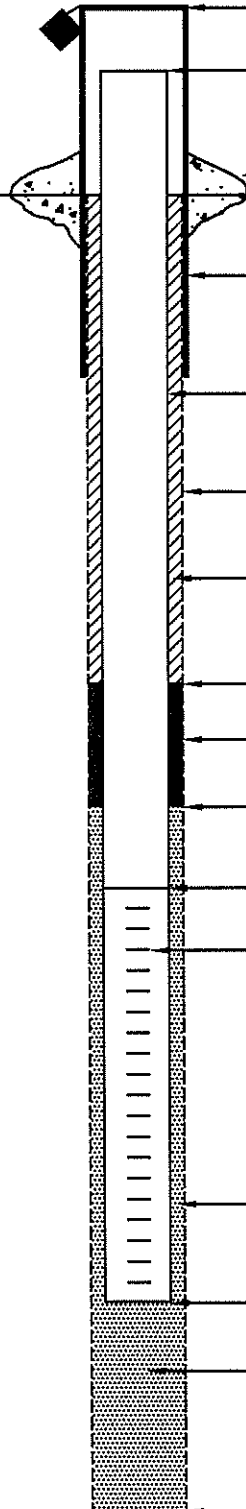
Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: MW-306\$

PROJECT <u>NWIRP Bethpage</u>	LOCATION <u>Site 1</u>	DRILLER <u>Jason Gucci</u>
PROJECT NO. <u>112602230</u>	BORING <u>MW-306\$</u>	DRILLING METHOD <u>HSA</u>
DATE BEGUN <u>12-8-11</u>	DATE COMPLETED <u>12-8-11</u>	DEVELOPMENT METHOD _____
FIELD GEOLOGIST <u>Vince Shickora</u>	DATUM _____	
GROUND ELEVATION _____		

ACAD:FORM_MWSU.dwg 07/20/99 INL



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: 1

ELEVATION/HEIGHT OF TOP OF RISER PIPE: 1

TYPE OF SURFACE SEAL: _____

I.D. OF SURFACE CASING: _____

TYPE OF SURFACE CASING: _____

RISER PIPE I.D.: 2 inch

TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8 inch

TYPE OF BACKFILL: Cement High Solids Bentonite / Portland Cement

ELEVATION/DEPTH TOP OF SEAL: 141'

TYPE OF SEAL: 3/8" Bentonite Holeplug

DEPTH TOP OF SAND PACK: 46'

ELEVATION/DEPTH TOP OF SCREEN: 150'

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.01" x 10'

I.D. OF SCREEN: 2 inch

TYPE OF SAND PACK: #1 Silica Quartz

ELEVATION/DEPTH BOTTOM OF SCREEN: 160'

ELEVATION/DEPTH BOTTOM OF SAND PACK: 160'

BACKFILL MATERIAL BELOW SAND: Natural Formation

ELEVATION/DEPTH OF HOLE: 160'



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: MW-306I

PROJECT <u>NWIRP Both page</u>	LOCATION <u>Site 1</u>	DRILLER <u>Jason Gucci</u>
PROJECT NO. <u>112602230</u>	BORING <u>MW-306I</u>	DRILLING METHOD <u>HSA</u>
DATE BEGUN <u>12-6-11</u>	DATE COMPLETED _____	DEVELOPMENT METHOD _____
FIELD GEOLOGIST <u>Vince Shickora</u>		
GROUND ELEVATION _____	DATUM _____	

ACAD:FORM_MWSU.dwg 07/20/99 INL

	ELEVATION/HEIGHT OF TOP OF SURFACE CASING:	<u>/</u>
	ELEVATION/HEIGHT OF TOP OF RISER PIPE:	<u>/</u>
	TYPE OF SURFACE SEAL:	_____
	I.D. OF SURFACE CASING:	_____
	TYPE OF SURFACE CASING:	_____
	RISER PIPE I.D.:	<u>2 inch</u>
	TYPE OF RISER PIPE:	<u>Schedule 40 PVC</u>
	BOREHOLE DIAMETER:	<u>8 inch</u>
	TYPE OF BACKFILL:	<u>Cetco High Solids Bentonite/Portland Cement Grout</u>
	ELEVATION/DEPTH TOP OF SEAL:	<u>1186'</u>
	TYPE OF SEAL:	<u>3/8" Bentonite Holeplug</u>
	DEPTH TOP OF SAND PACK:	<u>1185'</u>
	ELEVATION/DEPTH TOP OF SCREEN:	<u>1189'</u>
	TYPE OF SCREEN:	<u>Schedule 40 PVC</u>
SLOT SIZE x LENGTH:	<u>0.01" x 10'</u>	
I.D. OF SCREEN:	<u>2 inch</u>	
TYPE OF SAND PACK:	<u>#1 Silica Quartz</u>	
ELEVATION/DEPTH BOTTOM OF SCREEN:	<u>1199'</u>	
ELEVATION/DEPTH BOTTOM OF SAND PACK:	<u>1199'</u>	
BACKFILL MATERIAL BELOW SAND:	<u>NATURAL FORMATION</u>	
ELEVATION/DEPTH OF HOLE:	<u>1199'</u>	



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: MW-3060

PROJECT <u>NWIRP Bethpage</u>	LOCATION <u>Site 1</u>	DRILLER <u>Bill Murphy</u>
PROJECT NO. <u>112602230</u>	BORING <u>MW-3060</u>	DRILLING METHOD <u>Mod. Rotary</u>
DATE BEGUN <u>11-28-11</u>	DATE COMPLETED _____	DEVELOPMENT METHOD _____
FIELD GEOLOGIST <u>Vince Shickora</u>		
GROUND ELEVATION _____	DATUM _____	

ACAD:FORM_MWSU.dwg 07/20/99 INL

	ELEVATION/HEIGHT OF TOP OF SURFACE CASING: <u>1</u>
	ELEVATION/HEIGHT OF TOP OF RISER PIPE: <u>1</u>
	TYPE OF SURFACE SEAL: _____
	I.D. OF SURFACE CASING: _____
	TYPE OF SURFACE CASING: _____
	RISER PIPE I.D.: <u>2 inch</u>
	TYPE OF RISER PIPE: <u>Schedule 40 PVC</u>
	BOREHOLE DIAMETER: <u>8 inch</u>
	TYPE OF BACKFILL: <u>Cetco High Solids Bentonite - Cement (Portland) Grout</u>
	ELEVATION/DEPTH TOP OF SEAL: <u>1</u>
	TYPE OF SEAL: <u>Cetco High Solids Bentonite - Cement (Portland) Grout</u>
	DEPTH TOP OF SAND PACK: <u>270'</u>
	ELEVATION/DEPTH TOP OF SCREEN: <u>1284</u>
	TYPE OF SCREEN: <u>Schedule 40 PVC</u>
SLOT SIZE x LENGTH: <u>0.01" x 10'</u>	
I.D. OF SCREEN: <u>2 inch</u>	
TYPE OF SAND PACK: <u>#1 Silica Quartz to 279'</u> <u>#00 Silica Quartz From 279' to 270' BGS</u>	
ELEVATION/DEPTH BOTTOM OF SCREEN: <u>1294'</u>	
ELEVATION/DEPTH BOTTOM OF SAND PACK: <u>1303'</u>	
BACKFILL MATERIAL BELOW SAND: <u>NA</u>	
ELEVATION/DEPTH OF HOLE: <u>1303'</u>	



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: MW-3075

PROJECT <u>BETHPAGE SITE 1 INVESTIGATION</u>	LOCATION <u>BETHPAGE New York</u>	DRILLER <u>GOARLT</u>
PROJECT NO. <u>112622230</u>	BORING <u>B31-T1-MW3075</u>	DRILLING METHOD <u>Howell Screen Augers</u>
DATE BEGUN <u>November 21 2011</u>	DATE COMPLETED <u>November 16 2011</u>	DEVELOPMENT METHOD
FIELD GEOLOGIST <u>J. FERGUSON</u>	DATUM	
GROUND ELEVATION		

ACAD: FORM_MWSU.dwg 07/20/99 INL

	ELEVATION/HEIGHT OF TOP OF SURFACE CASING:	<u>1</u>
	ELEVATION/HEIGHT OF TOP OF RISER PIPE:	<u>1</u>
	TYPE OF SURFACE SEAL:	
	I.D. OF SURFACE CASING:	
	TYPE OF SURFACE CASING:	
	RISER PIPE I.D.:	<u>2"</u>
	TYPE OF RISER PIPE:	<u>SCH 40</u>
	BOREHOLE DIAMETER:	<u>8.25" ϕ</u>
	TYPE OF BACKFILL:	<u>CRICO BENTONITE - Cement grout</u>
	ELEVATION/DEPTH TOP OF SEAL:	<u>31.5' /</u>
	TYPE OF SEAL:	<u>BENTONITE Pellet Seal</u>
	DEPTH TOP OF SAND PACK:	<u>35.5' /</u>
	ELEVATION/DEPTH TOP OF SCREEN:	<u>40.5' /</u>
	TYPE OF SCREEN:	<u>Schedule 40 PVC</u>
SLOT SIZE x LENGTH:	<u>0.010 SLOT - 10'</u>	
I.D. OF SCREEN:	<u>2"</u>	
TYPE OF SAND PACK:	<u>#1 SILICA SAND</u>	
ELEVATION/DEPTH BOTTOM OF SCREEN:	<u>50.5' /</u>	
ELEVATION/DEPTH BOTTOM OF SAND PACK:	<u>50.5' /</u>	
BACKFILL MATERIAL BELOW SAND:	<u>N/A</u>	
ELEVATION/DEPTH OF HOLE:	<u>50.5' /</u>	



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: MW-307-I

PROJECT <u>112602230</u>	LOCATION <u>BETHPAGE New York</u>	DRILLER <u>GUERCI</u>
PROJECT NO. <u>BETHPAGE SITE 1 INJECT</u>	BORING <u>8831-TT-MW307-I</u>	DRILLING METHOD <u>Hollow Stem Auger</u>
DATE BEGUN <u>November 17, 2011</u>	DATE COMPLETED <u>Nov 18, 2011</u>	DEVELOPMENT METHOD
FIELD GEOLOGIST <u>J. LUTGUSON</u>		
GROUND ELEVATION	DATUM	

ACAD: FORM_MWSU.dwg 07/28/99 INL

ELEVATION/HEIGHT OF TOP OF SURFACE CASING: 1

ELEVATION/HEIGHT OF TOP OF RISER PIPE: 1

TYPE OF SURFACE SEAL: _____

I.D. OF SURFACE CASING: _____

TYPE OF SURFACE CASING: _____

RISER PIPE I.D.: 2" Ø

TYPE OF RISER PIPE: Sch 40 PVC

BOREHOLE DIAMETER: 8 1/4" 115A

TYPE OF BACKFILL: Cerco High Solids Bentonite Cement (Portland) Grout

ELEVATION/DEPTH TOP OF SEAL: 181'1

TYPE OF SEAL: BENTONITE PEMENT

DEPTH TOP OF SAND PACK: 185'

ELEVATION/DEPTH TOP OF SCREEN: 190'1

TYPE OF SCREEN: Sch 40 PVC

SLOT SIZE x LENGTH: 0.010 slot - 16"

I.D. OF SCREEN: 2"

TYPE OF SAND PACK: #1 SILICA SANDPACK

ELEVATION/DEPTH BOTTOM OF SCREEN: 205'1

ELEVATION/DEPTH BOTTOM OF SAND PACK: 200'1

BACKFILL MATERIAL BELOW SAND: _____

ELEVATION/DEPTH OF HOLE: 200'1



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: MW-307D

PROJECT <u>BENMAPAGE SITE 1 INVEST.</u>	LOCATION <u>BENMAPAGE New York</u>	DRILLER <u>MURPHY</u>
PROJECT NO. <u>112608230</u>	BORING <u>BPT-IT-MW307D</u>	DRILLING METHOD <u>MUD Rotary</u>
DATE BEGUN <u>November 3, 2011</u>	DATE COMPLETED <u>Nov 11, 2011</u>	DEVELOPMENT METHOD
FIELD GEOLOGIST <u>J. FERGUSON</u>	DATUM	
GROUND ELEVATION		

ACAD: FORM_MWSU.dwg 07/28/99 INL

ELEVATION/HEIGHT OF TOP OF SURFACE CASING: 1

ELEVATION/HEIGHT OF TOP OF RISER PIPE: 1

TYPE OF SURFACE SEAL: _____

I.D. OF SURFACE CASING: _____

TYPE OF SURFACE CASING: _____

RISER PIPE I.D.: 2" Ø

TYPE OF RISER PIPE: SCH 40 PVC

BOREHOLE DIAMETER: 8" Ø MUD ROTARY

TYPE OF BACKFILL: Cerco High Solids BENTONITE - Cement (Portland) GROUT

ELEVATION/DEPTH TOP OF SEAL: 2' 1

TYPE OF SEAL: Cerco High Solids BENTONITE Cement (Portland) GROUT

DEPTH TOP OF SAND PACK: 266

ELEVATION/DEPTH TOP OF SCREEN: 276' 1

TYPE OF SCREEN: Sch 40 PVC

SLOT SIZE x LENGTH: 0.010 SLOT - 10'

I.D. OF SCREEN: 2" Ø

TYPE OF SAND PACK: #1 SILICA SANDPACK (271-286' SILICA) (266'-271' CO)

ELEVATION/DEPTH BOTTOM OF SCREEN: 286' 1

ELEVATION/DEPTH BOTTOM OF SAND PACK: 286' 1

BACKFILL MATERIAL BELOW SAND: #1 SILICA SAND (286'-433')

ELEVATION/DEPTH OF HOLE: 433' 1



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: BPS1-TT-MW3085

PROJECT <u>BETHPAGE SITE 1 INVEST.</u>	LOCATION <u>BPS1-TT-MW3085</u>	DRILLER <u>J. GUERCT</u>
PROJECT NO. <u>117602230</u>	BORING <u>MW-3085</u>	DRILLING METHOD <u>4 1/4" HSA</u>
DATE BEGUN <u>11-11-2011</u>	DATE COMPLETED <u>11-14-2011</u>	DEVELOPMENT METHOD _____
FIELD GEOLOGIST <u>J. FERGUSON</u>		
GROUND ELEVATION _____	DATUM _____	

ACAD: FORM_MWSU.dwg 07/20/99 INL

ELEVATION/HEIGHT OF TOP OF SURFACE CASING: _____	1
ELEVATION/HEIGHT OF TOP OF RISER PIPE: _____	1
TYPE OF SURFACE SEAL: _____	
I.D. OF SURFACE CASING: _____	
TYPE OF SURFACE CASING: _____	
RISER PIPE I.D.: <u>2"</u>	
TYPE OF RISER PIPE: <u>SCH. 40 PVC</u>	
BOREHOLE DIAMETER: <u>8 1/4" Ø HSA</u>	
TYPE OF BACKFILL: <u>BENTONITE Cement Grout</u> <u>(CEMENT HIGH SOLIDS BENTONITE)</u>	
ELEVATION/DEPTH TOP OF SEAL: _____	<u>48' 1</u>
TYPE OF SEAL: <u>BENTONITE PELLETS</u>	
DEPTH TOP OF SAND PACK: _____	<u>50'</u>
ELEVATION/DEPTH TOP OF SCREEN: _____	<u>54' 1</u>
TYPE OF SCREEN: <u>SCH 40 PVC</u>	
SLOT SIZE x LENGTH: <u>0.010 SLOT - 10'</u>	
I.D. OF SCREEN: <u>2"</u>	
TYPE OF SAND PACK: <u>#1 SILICA</u>	
ELEVATION/DEPTH BOTTOM OF SCREEN: _____	<u>64' 1</u>
ELEVATION/DEPTH BOTTOM OF SAND PACK: _____	<u>64' 1</u>
BACKFILL MATERIAL BELOW SAND: <u>#1 SILICA</u>	
ELEVATION/DEPTH OF HOLE: _____	<u>64' 1</u>



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: BPS1-TT-MW308T

PROJECT <u>BETHPAGE SITE 1 INVEST.</u>	LOCATION <u>BPS1-TT-MW308T</u>	DRILLER <u>J. GUERCI</u>
PROJECT NO. <u>112603330</u>	BORING <u>MW-308T</u>	DRILLING METHOD <u>1 1/4" ϕ HSA</u>
DATE BEGUN <u>11-14-2011</u>	DATE COMPLETED <u>11-15-2011</u>	DEVELOPMENT METHOD <u></u>
FIELD GEOLOGIST <u>T. FERGUSON</u>	DATUM <u></u>	
GROUND ELEVATION <u></u>		

ACAD:FORM_MWSL.dwg 07/20/99 INL

ELEVATION/HEIGHT OF TOP OF SURFACE CASING: 1

ELEVATION/HEIGHT OF TOP OF RISER PIPE: 1

TYPE OF SURFACE SEAL:

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING:

RISER PIPE I.D.: 2"

TYPE OF RISER PIPE: SCHEDULE 40 PVC

BOREHOLE DIAMETER: 8 1/4" ϕ HSA

TYPE OF BACKFILL: BENTONITE - cement grout (LETO HIGH SOLIDS BENTONITE)

ELEVATION/DEPTH TOP OF SEAL: 1461

TYPE OF SEAL: BENTONITE PELLETS

DEPTH TOP OF SAND PACK: 150

ELEVATION/DEPTH TOP OF SCREEN: 1561

TYPE OF SCREEN: 2" ϕ SCH 40, .010 SLOT

SLOT SIZE x LENGTH: .010 SLOT - 10'

I.D. OF SCREEN: 2"

TYPE OF SAND PACK: #1 SILICA

ELEVATION/DEPTH BOTTOM OF SCREEN: 1661

ELEVATION/DEPTH BOTTOM OF SAND PACK: 1661

BACKFILL MATERIAL BELOW SAND: #1 SILICA

ELEVATION/DEPTH OF HOLE: 1



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OVERBURDEN MONITORING WELL SHEET STICK-UP

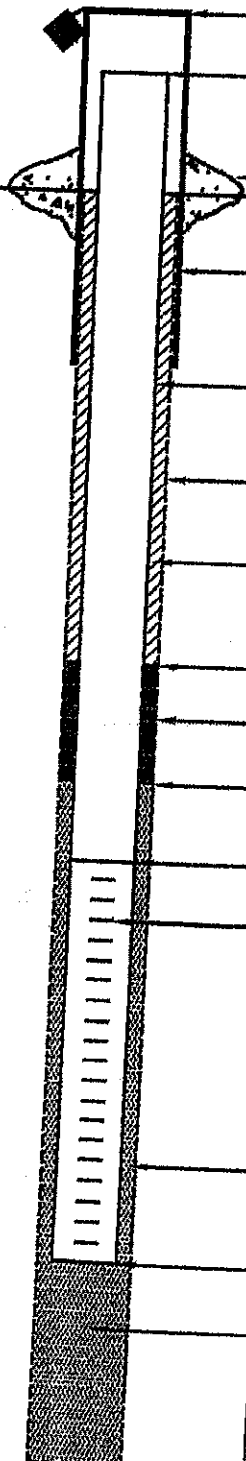
WELL NO.: MW-3081

PROJECT BETHLEHEM SITE 1 TUNNAGE
PROJECT NO. 117602230
DATE BEGUN Oct 30, 2011
FIELD GEOLOGIST J. KIRKINSON
GROUND ELEVATION _____

LOCATION BETHLEHEM NY
BORING BP#1 JT-MW3081
DATE COMPLETED October 31, 2011
DATUM _____

DRILLER B. MURPHY
DRILLING METHOD Mod Rotary
DEVELOPMENT METHOD _____

ACAD: FORM_MWSU.dwg 07/20/99 INL



ELEVATION/HEIGHT OF TOP OF SURFACE CASING: 1
ELEVATION/HEIGHT OF TOP OF RISER PIPE: 1
TYPE OF SURFACE SEAL: _____
I.D. OF SURFACE CASING: _____
TYPE OF SURFACE CASING: _____
RISER PIPE I.D.: 2" Ø
TYPE OF RISER PIPE: SCH 40 PVC
BOREHOLE DIAMETER: 2" Ø
TYPE OF BACKFILL: Cement High Solids Bentonite
Cement (Per Hand) Grout.
ELEVATION/DEPTH TOP OF SEAL: 241.1
TYPE OF SEAL: BENTONITE PELLETS
DEPTH TOP OF SAND PACK: 243
ELEVATION/DEPTH TOP OF SCREEN: 250.1
TYPE OF SCREEN: SCH. 40 PVC
SLOT SIZE x LENGTH: 0.010 SLOT - 10'
I.D. OF SCREEN: 2" Ø
TYPE OF SAND PACK: 5/16" Sandpack
(#1 Sand 245-262)
ELEVATION/DEPTH BOTTOM OF SCREEN: 260.1
ELEVATION/DEPTH BOTTOM OF SAND PACK: 262.1
BACKFILL MATERIAL BELOW SAND: 1/2" Sand (240-262)
#1 Sand (262-283) Bentonite (262-266)
ELEVATION/DEPTH OF HOLE: 283.1



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

WELL NO.: BPSI-MW309\$

PROJECT <u>NWIRP Bethpage Site</u>	LOCATION <u>MW309\$</u>	DRILLER <u>J. Gucci</u>
PROJECT NO. <u>112602230</u>	BORING <u>BPSI-MW309\$</u>	DRILLING METHOD <u>HSA</u>
DATE BEGUN <u>11-9-11</u>	DATE COMPLETED _____	DEVELOPMENT METHOD _____
FIELD GEOLOGIST <u>J. Birkett</u>		
GROUND ELEVATION _____	DATUM _____	

ACAD:FORM_MWFM.dwg 07/20/99 INL

FLUSH MOUNT
SURFACE CASING
WITH LOCK



ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: _____

TYPE OF PROTECTIVE CASING: _____

I.D. OF PROTECTIVE CASING: _____

DIAMETER OF HOLE: 8"

TYPE OF RISER PIPE: Schedule 40 PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: Bentonite grout w/ some cement

ELEVATION/DEPTH TOP OF SEAL: 44.5'

TYPE OF SEAL: Hydrated bentonite pellets
Cetco Coated tablets (1/4")

ELEVATION/DEPTH TOP OF SAND: 49'

ELEVATION/DEPTH TOP OF SCREEN: 2" 53'

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010" x 10'

TYPE OF SAND PACK: #1 Silica sand
Filpro Superior Quartz Filtration Media

DIAMETER OF HOLE IN BEDROCK: _____

ELEVATION / DEPTH BOTTOM OF SCREEN: 63'

ELEVATION / DEPTH BOTTOM OF SAND: 63'

ELEVATION/DEPTH BOTTOM OF HOLE: 63'

BACKFILL MATERIAL BELOW SAND: 63'



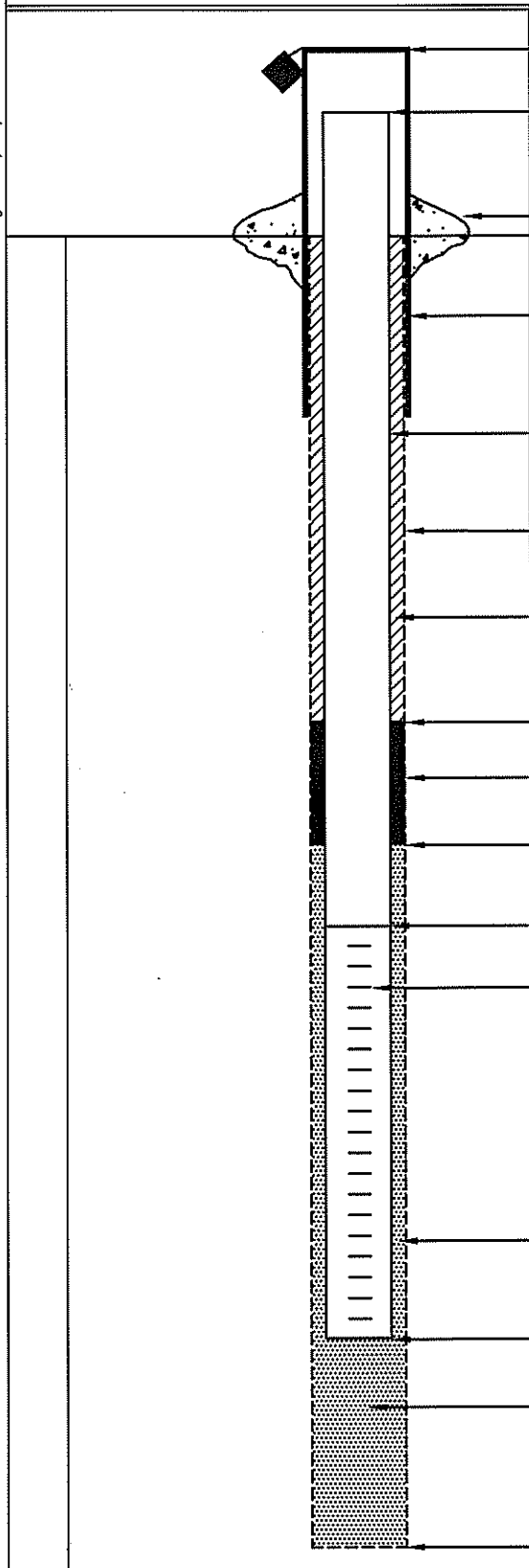
Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: BPSI-MW309 I

PROJECT <u>NWIRP Bethpage</u>	LOCATION <u>MW309</u>	DRILLER <u>Jason Gucci</u>
PROJECT NO. <u>112602230</u>	BORING <u>BPSI-MW309 I</u>	DRILLING METHOD <u>HSA</u>
DATE BEGUN <u>11-8-11</u>	DATE COMPLETED <u>11-8-11</u>	DEVELOPMENT METHOD _____
FIELD GEOLOGIST <u>J. Birkett</u>	GROUND ELEVATION _____	DATUM _____

ACAD:FORM_MWSU.dwg 07/20/99 INL



The diagram shows a vertical cross-section of a monitoring well. At the top, there is a surface casing with a seal. Below this is a riser pipe. The well is filled with backfill material, which is a cement bentonite grout. A seal is located at an elevation of 152. Below the seal is a sand pack made of #1 silica sand. A screen is located at an elevation of 160. The screen has a slot size of 10 slot x 10' long and an I.D. of 2". The bottom of the screen is at an elevation of 170. The bottom of the sand pack is also at an elevation of 170. The backfill material below the sand pack is also at an elevation of 170. The hole itself is at an elevation of 170.

ELEVATION/HEIGHT OF TOP OF SURFACE CASING:	____/____
ELEVATION/HEIGHT OF TOP OF RISER PIPE:	____/____
TYPE OF SURFACE SEAL:	_____
I.D. OF SURFACE CASING:	_____
TYPE OF SURFACE CASING:	_____
RISER PIPE I.D.:	<u>2"</u>
TYPE OF RISER PIPE:	<u>Schedule 40 PVC</u>
BOREHOLE DIAMETER:	<u>8"</u>
TYPE OF BACKFILL:	<u>Cement bentonite grout to 50' bgs</u>
ELEVATION/DEPTH TOP OF SEAL:	____/ <u>152</u>
TYPE OF SEAL:	<u>Hydrated Bentonite pellets</u>
	<u>Cetco coated tablets (1/4")</u>
DEPTH TOP OF SAND PACK:	____/ <u>156</u>
ELEVATION/DEPTH TOP OF SCREEN:	____/ <u>160</u>
TYPE OF SCREEN:	<u>Schedule 40 PVC</u>
SLOT SIZE x LENGTH:	<u>10 slot x 10' long</u>
I.D. OF SCREEN:	<u>2"</u>
TYPE OF SAND PACK:	<u>#1 Silica Sand</u>
	<u>Filpro Superior Quartz Filtration Media</u>
ELEVATION/DEPTH BOTTOM OF SCREEN:	____/ <u>170</u>
ELEVATION/DEPTH BOTTOM OF SAND PACK:	____/ <u>170</u>
BACKFILL MATERIAL BELOW SAND:	_____
ELEVATION/DEPTH OF HOLE:	____/ <u>170</u>



Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET STICK-UP

WELL NO.: BPSI-TT-MW309D

PROJECT <u>Bethpage Site Investigation</u>	LOCATION <u>Bethpage New York</u>	DRILLER <u>B. Murphy</u>
PROJECT NO. <u>112602230</u>	BORING <u>BPSI-TT-MW309D</u>	DRILLING METHOD <u>Mud Rotary</u>
DATE BEGUN _____	DATE COMPLETED <u>Nov. 10, 2012</u>	DEVELOPMENT METHOD <u>Air Lift and Ground Feis</u>
FIELD GEOLOGIST <u>J. Ferguson</u>	GROUND ELEVATION _____	DATUM _____

ACAD: FORM_MWSU.dwg 07/20/99 INL

ELEVATION/HEIGHT OF TOP OF SURFACE CASING: 1 3'

ELEVATION/HEIGHT OF TOP OF RISER PIPE: 1 2.75'

TYPE OF SURFACE SEAL: Concrete

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: Protective Steel Casing
Square

RISER PIPE I.D.: 2"

TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8.25"

TYPE OF BACKFILL: Cetco bentonite/portland cement

ELEVATION/DEPTH TOP OF SEAL: 1 2.44'

TYPE OF SEAL: Bentonite Pellets

DEPTH TOP OF SAND PACK: 2.48'

ELEVATION/DEPTH TOP OF SCREEN: 1 2.52'

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE x LENGTH: 0.010 Slot by 10'

I.D. OF SCREEN: 2" ID

TYPE OF SAND PACK: No. 1 Silica Sand

ELEVATION/DEPTH BOTTOM OF SCREEN: 1 2.62'

ELEVATION/DEPTH BOTTOM OF SAND PACK: 1 2.62'

BACKFILL MATERIAL BELOW SAND: Natural Backfill

ELEVATION/DEPTH OF HOLE: 1 2.75'

Monitoring Well Development Records

Page 1 of 1[illegible]



Page 1 of 1

Well: <u>BP-MW-305D</u>	Depth to Bottom (ft.): <u>291.6'</u>	Responsible Personnel: <u>J. Ferguson</u>
Site: <u>Bethpage Site 1</u>	Static Water Level Before (ft.): <u>44.45'</u>	Drilling Co.: <u>Delta Drilling</u>
Date Installed: <u>11/11/2011</u>	Static Water Level After (ft.): <u>44.47'</u>	Project Name: <u>Bethpage Site 1</u>
Date Developed: <u>12/07/2011</u>	Screen Length (ft.): <u>10'</u>	Project Number: <u>112G02230</u>
Dev. Method: <u>Airlift/submersible</u>	Specific Capacity: <u>Not determined</u>	
Pump Type: <u>centrifugal</u>	Casing ID (in.): <u>2" ID</u>	

[illegible]



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Well: <u>BP-MW-306S</u>	Depth to Bottom (ft.): <u>50.3'</u>	Responsible Personnel: <u>J. Ferguson</u>
Site: <u>Bethpage Site 1</u>	Static Water Level Before (ft.): <u>43.14'</u>	Drilling Co.: <u>Delta Drilling</u>
Date Installed: <u>12/07-08/2011</u>	Static Water Level After (ft.): <u>43.15'</u>	Project Name: <u>Bethpage Site 1</u>
Date Developed: <u>12/08/2011</u>	Screen Length (ft.): <u>10'</u>	Project Number: <u>112G02230</u>
Dev. Method: <u>Airlift/submersible</u>	Specific Capacity: <u>Not determined</u>	
Pump Type: <u>centrifugal</u>	Casing ID (in.): <u>2" ID</u>	

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Page 1 of 1[illegible]

Page 1 of 1

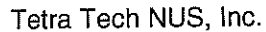
Well: <u>BP-MW-306D</u>	Depth to Bottom (ft.): <u>294'</u>	Responsible Personnel: <u>J. Ferguson</u>
Site: <u>Bethpage Site 1</u>	Static Water Level Before (ft.): <u>43.98'</u>	Drilling Co.: <u>Delta Drilling</u>
Date Installed: <u>11/28-30/2011</u>	Static Water Level After (ft.): <u>43.96'</u>	Project Name: <u>Bethpage Site 1</u>
Date Developed: <u>12/11/2011</u>	Screen Length (ft.): <u>10'</u>	Project Number: <u>112G02230</u>
Dev. Method: <u>Airlift/submersible</u>	Specific Capacity: <u>Not determined</u>	
Pump Type: <u>centrifugal</u>	Casing ID (in.): <u>2" ID</u>	

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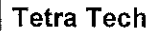
Well: <u>BP-TT-MW-307S</u>	Depth to Bottom: (ft.): <u>50.5'</u>	Responsible Personnel: <u>J. Ferguson</u>
Site: <u>Bethpage Site 1</u>	Static Water Level Before (ft.): <u>47.98'</u>	Drilling Co.: <u>Delta Drilling</u>
Date Installed: <u>11/11/2011</u>	Static Water Level After (ft.): <u>47.75'</u>	Project Name: <u>Bethpage Site 1</u>
Date Developed: <u>12/06/2011</u>	Screen Length (ft.): <u>10'</u>	Project Number: <u>112G02230</u>
Dev. Method: <u>Submersible</u>	Specific Capacity: <u>Not determined</u>	
Pump Type: <u>Fultz-centrifugal</u>	Casing ID (in.): <u>2" ID</u>	

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Page 1 of 1

Well: BPS1-TT-MW307T Depth to Bottom (ft.): 200 Responsible Personnel: Kristi Francisco
Site: Site 1 Static Water Level Before (ft.): 44.7 Drilling Co.: DELTA
Date Installed: _____ Static Water Level After (ft.): 45.21 Project Name: Site 1 - PCB Investigation
Date Developed: 12/2/11 Screen Length (ft.): 10' Project Number: 112002230
Dev. Method: Pump & Surge Specific Capacity: _____
Pump Type: Grundfos Casing ID (in.): 2" 1025 - Development begins

[illegible]

Page 1 of 1

Well: <u>BP-MW-307D</u>	Depth to Bottom (ft.): <u>286'</u>	Responsible Personnel: <u>J. Ferguson</u>
Site: <u>Bethpage Site 1</u>	Static Water Level Before (ft.): <u>43.98'</u>	Drilling Co.: <u>Delta Drilling</u>
Date Installed: <u>11/11/2011</u>	Static Water Level After (ft.): <u>43.96'</u>	Project Name: <u>Bethpage Site 1</u>
Date Developed: <u>12/05/2011</u>	Screen Length (ft.): <u>10'</u>	Project Number: <u>112G02230</u>
Dev. Method: <u>Airlift/submersible</u>	Specific Capacity: <u>Not determined</u>	
Pump Type: <u>centrifugal</u>	Casing ID (in.): <u>2" ID</u>	

[illegible]

Groundwater Sample and Low Flow Purge Logsheets



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-FWMW01 - 01192012Sample Location: BPS1-FWMW 01Sampled By: VAC

C.O.C. No.: _____

Type of Sample: _____

☒ Low Concentration☐ High Concentration

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

SAMPLING DATA:

Date: <u>1-19-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>0930</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>7.08</u>	<u>0.461</u>	<u>13.93</u>	<u>8.9</u>	<u>6.71</u>	<u>-</u>	<u>248</u>

PURGE DATA:

Date: <u>1-19-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): <u>52.30</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>0830</u>								
End Purge (hrs): <u>0930</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal): <u>6.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>-</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>-</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>-</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit result → 0.01 mg/L

Circle If Applicable:

MS/MSD

-

Duplicate ID No.:

-

Signature(s):

VAC



BPSI-FW-MWOI

1-19-12

PAGE 1 OF 1



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name:	NWIRP Bethpage Site 1	Sample ID No.:	BPS1-FW-MW02-01172012
Project No.:	112G02230	Sample Location:	BPS1-FW-MW02
<input type="checkbox"/> Domestic Well Data <input checked="" type="checkbox"/> Monitoring Well Data <input type="checkbox"/> Other Well Type: <input type="checkbox"/> QA Sample Type:		Sampled By:	VAS
		C.O.C. No.:	
		Type of Sample:	<input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
1-17-12	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Time: 1515	Clear	6.97	0.463	15.86	6.8	7.05	-	208
Method: Low Flow - Grundfos								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
1-17-12								
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): 64'								
Static Water Level (WL): 52.78'								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1415								
End Purge (hrs): 1515								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 5.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L amber glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	--
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	--
TOC	H2SO4	3 40-mL amber glass vials	--

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit result → 0.01 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:

NWIRP Bethpage Site 1

WELL ID.:

BPSI-FW-MW02

PROJECT NUMBER:

112G02230

DATE:

1-17-12

[illegible]

SIGNATURE(S):

[Handwritten signature]

PAGE 7 OF 7



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-FW-MW03 - 01192012Sample Location: BPS1-FW-MW03Sampled By: VAS

C.O.C. No.: _____

Type of Sample: _____

☒ Low Concentration☐ High Concentration

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

SAMPLING DATA:

Date: <u>1-19-12</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: <u>1110</u>	<u>Clear</u>	<u>6.28</u>	<u>0.182</u>	<u>15.30</u>	<u>3.1</u>	<u>8.90</u>	<u>-</u>	<u>229</u>
Method: Low Flow - Grundfos								

PURGE DATA:

Date: <u>1-19-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): <u>51.43</u>								
One Casing Volume(gal/L): --								
Start Purge (hrs): <u>1010</u>								
End Purge (hrs): <u>1110</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal/L): <u>6.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>-</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>-</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>-</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit result → 0.01 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: -

Signature(s):



1-19-12

SIGNATURE(S): 



GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1Project Site Name: NWIRP Bethpage Site 1Project No.: 112G02230Sample ID No.: BPS1-HMMW29I-01192012Sample Location: BPS1-HMMW29ISampled By: S. Birkett

C.O.C. No.: _____

Type of Sample:

☒ Low Concentration☐ High Concentration

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

SAMPLING DATA:

Date: <u>1-19-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>0917</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>11.21</u>	<u>0.339</u>	<u>13.13</u>	<u>2.63</u>	<u>5.20</u>	<u>0.02</u>	<u>11</u>

PURGE DATA:

Date: <u>1-19-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>—</u>								
Well Casing Diameter & Material								
Type: <u>4" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>130.5</u>								
Static Water Level (WL): <u>42.11</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>0810</u>								
End Purge (hrs): <u>0917</u>								
Total Purge Time (min): <u>67</u>								
Total Vol. Purged (gal/L): <u>8 gal</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>yes</u>
PCBs	--	2 1-L amber glass vials	<u>yes</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>no</u>
Total Metals (Total Cr and Fe)+ <u>Cu+Na</u>	HNO3	1 500-mL plastic bottle	<u>yes</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>no</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>no</u>

OBSERVATIONS / NOTES:

No stains or odors High pH
Pump set within screened intervals ~2 feet off bottom
Hexavalent Chromium Test Kit Result: 0.01 mg/L

Circle if Applicable:

MS/MSD

—

Duplicate ID No.:

1630
BPS1-Dup03-01192012

Signature(s):



NWIRP Bethpage Site 1

BPSI-HN-29I ^{MW}

112G02230

DATE:

1-19-12

SIGNATURE(S): J. B. Bull



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW301# 01172412Sample Location: BPS1-TT-MW301#Sampled By: VAS

C.O.C. No.: _____

Type of Sample: _____

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

- ☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

Date: <u>1-17-12</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: <u>1140</u>	<u>clear</u>	<u>6.06</u>	<u>0.026</u>	<u>17.12</u>	<u>0.0</u>	<u>8.08</u>	<u>--</u>	<u>262</u>
Method: Low Flow - Grundfos								

PURGE DATA:

Date: <u>1-17-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>62'</u>								
Static Water Level (WL): <u>51.09'</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1040</u>								
End Purge (hrs): <u>1140</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal/L): <u>5.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>--</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>--</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>--</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.01 mg/L

Circle if Applicable:

MS/MSD

--Duplicate ID No.: --

Signature(s):



BPSI-TT-MW301\$

1-17-12

SIGNATURE(S): *[Signature]*



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TR-MW301E-0117-2012Sample Location: BPS1-TR-MW301ESampled By: VAS

C.O.C. No.: _____

Type of Sample: _____

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-17-12</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: <u>1305</u>	<u>clear</u>	<u>5.80</u>	<u>0.032</u>	<u>13.94</u>	<u>0.1</u>	<u>8.74</u>	<u>—</u>	<u>280</u>
Method: Low Flow - Grundfos								

PURGE DATA:

Date: <u>1-17-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>141</u>								
Static Water Level (WL): <u>50.95</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1205</u>								
End Purge (hrs): <u>1305</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal/L): <u>6.0</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>1</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>—</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>—</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit results → 0.01 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:

NWIRP Bethpage Site 1

WELL ID.:

BPSI-TT-MW301I

PROJECT NUMBER:

112G02230

DATE:

1-17-12

[illegible]

SIGNATURE(S):

inf 10

PAGE 1 OF 1



GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW3010-01172012Sample Location: BPS1-TT-MW3010Sampled By: VAS

C.O.C. No.: _____

Type of Sample:

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-17-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>0950</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>5.78</u>	<u>0.397</u>	<u>14.48</u>	<u>0.0</u>	<u>5.15</u>	<u>-</u>	<u>263</u>

PURGE DATA:

Date: <u>1-17-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>221'</u>								
Static Water Level (WL): <u>51.75'</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>0850</u>								
End Purge (hrs): <u>0950</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal): <u>5.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>-</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>-</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>-</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.09 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: -

Signature(s):



NWIRP Bethpage Site 1

BPSI-TT-MW301d

112G02230

DATE: _____

1-17-12

SIGNATURE(S): *CRP*



GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW301b - 01232012

Sample Location: BPS1-TT-MW301D

Sampled By: J. Birkett

C.O.C. No.:

Type of Sample:

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type:
☐ QA Sample Type:

- ☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

Date: 1-23-12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: 1230	clear	5.91	0.539	13.95	4.40	4.47	0.03	154
Method: Low Flow - Grundfos								

PURGE DATA:

Date: 1-23-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 51.83								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1044								
End Purge (hrs): 1230								
Total Purge Time (min): 46								
Total Vol. Purged (gal/L): 5.321								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	No
PCBs	--	2 1-L amber glass vials	No
Hexavalent Chromium	--	1 250-mL plastic bottle	Yes
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	No
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	No
TOC	H2SO4	3 40-mL amber glass vials	No

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.09 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):



BPSI-TT-MW301D-

1-23-12

[illegible]

SIGNATURE(S):



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW302#-01262012Sample Location: BPS1-TT-MW302#Sampled By: UAS

C.O.C. No.: _____

Type of Sample:

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-20-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>0920</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>6.36</u>	<u>0.040</u>	<u>16.62</u>	<u>0.4</u>	<u>7.23</u>	<u>-</u>	<u>220</u>

PURGE DATA:

Date: <u>1-20-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): <u>42.41'</u>								
One Casing Volume(gal/L): --								
Start Purge (hrs): <u>0820</u>								
End Purge (hrs): <u>0920</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal): <u>6.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>-</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>-</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>-</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit result → 0.01 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

UAS



BPSI-TT-MW302\$

1-20-12

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW302I1-01202012Sample Location: BPS1-TT-MW302I1Sampled By: VAS

C.O.C. No.: _____

Type of Sample: _____

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

- ☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

Date: <u>1-20-12</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: <u>1045</u>	<u>clear</u>	<u>5.36</u>	<u>0.125</u>	<u>15.33</u>	<u>0.4</u>	<u>6.87</u>	<u>-</u>	<u>308</u>
Method: Low Flow - Grundfos								

PURGE DATA:

Date: <u>1-20-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): <u>42.47</u>								
One Casing Volume(gal/L): --								
Start Purge (hrs): <u>0945</u>								
End Purge (hrs): <u>1045</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal): <u>6.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>-</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>-</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>-</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test R.t result → 0.00 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW30212-01202012Sample Location: BPS1-TT-MW30212Sampled By: J. Birket

C.O.C. No.: _____

Type of Sample:

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-20-12</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: <u>1115</u>	<u>clear</u>	<u>5.64</u>	<u>6.193</u>	<u>14.73</u>	<u>6.54</u>	<u>5.72</u>	<u>0.01</u>	<u>218</u>
Method: Low Flow - Grundfos								

PURGE DATA:

Date: <u>1-20-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>---</u>								
Well Casing Diameter & Material Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): <u>42.71</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1017</u>								
End Purge (hrs): <u>1115</u>								
Total Purge Time (min): <u>58</u>								
Total Vol. Purged (gal/L): <u>8 gal</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L amber glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.01 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



1-20-12

[illegible]

PAGE (OF)



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

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Project Site Name:	NWIRP Bethpage Site 1	Sample ID No.:	BPS1-TT-MW302D-01202012
Project No.:	112G02230	Sample Location:	BPS1-TT-MW302D
<input type="checkbox"/> Domestic Well Data		Sampled By:	J. Birkett
<input checked="" type="checkbox"/> Monitoring Well Data		C.O.C. No.:	
<input type="checkbox"/> Other Well Type:		Type of Sample:	
<input type="checkbox"/> QA Sample Type:		<input checked="" type="checkbox"/> Low Concentration	
		<input type="checkbox"/> High Concentration	

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
1-20-12	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Time: 1000	clear	9.38	0.264	15.16	2.19	4.73	0.01	109
Method: Low Flow - Grundfos								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
1-20-12								
Method: Low Flow - Grundfos								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.98								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0827								
End Purge (hrs): 1000								
Total Purge Time (min): 93								
Total Vol. Purged (gal/L): 125 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L amber glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe, Cu, etc.)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors

pH was high and would not stabilize - dropping

Pump set within screened intervals ~~2 feet off bottom~~

Hexavalent Chromium Test Kit Result: 0.00 mg/L

Note: Tubing was a little short, but probably near top of screen

Circle if Applicable:	Signature(s):
MS/MSD	
Duplicate ID No.:	

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:

NWIRP Bethpage Site 1

WELL ID.:

BPSI-TT-MW302D

PROJECT NUMBER:

112G02230

DATE:

1-20-12

[illegible]

SIGNATURE(S): Paul B. Smith

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

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Project Site Name:	NWIRP Bethpage Site 1	Sample ID No.:	BPS1-TT-MW303S-01232012
Project No.:	112G02230	Sample Location:	BPS1-TT-MW 303S
<input type="checkbox"/> Domestic Well Data <input checked="" type="checkbox"/> Monitoring Well Data <input type="checkbox"/> Other Well Type: _____ <input type="checkbox"/> QA Sample Type: _____		Sampled By: _____ C.O.C. No.: _____ Type of Sample: <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> High Concentration	

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
1-23-12	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Time: 1049	clear	6.65	0.442	16.88	4.26	9.71	0.02	156
Method: Low Flow - Grundfos								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
1-23-12								
Method: Low Flow - Grundfos								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.15								
One Casing Volume(gal/L): --								
Start Purge (hrs): 0949								
End Purge (hrs): 1049								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 7.991								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L amber glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result : 0.01mg/L

Circle if Applicable:	Signature(s):
MS/MSD <input type="checkbox"/>	Duplicate ID No.: 1600 BPS1-Dup04-01232012

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:

NWIRP Bethpage Site 1

WELL ID.:

BPSI-TT-MW-303 S

PROJECT NUMBER:

112G02230

DATE:

1-23-12

[illegible]

SIGNATURE(S):

S): *[Signature]*

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

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Project Site Name:	NWIRP Bethpage Site 1	Sample ID No.:	BPS1-TT-MW303E1-01192012
Project No.:	112G02230	Sample Location:	BPS1-TT-MW303E1
<input type="checkbox"/> Domestic Well Data <input checked="" type="checkbox"/> Monitoring Well Data <input type="checkbox"/> Other Well Type: <input type="checkbox"/> QA Sample Type:		Sampled By:	VAS
		C.O.C. No.:	
		Type of Sample:	<input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
1-19-12	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Time: 1415	tan color	9.61	0.206	15.81	339	0.07	—	-32
Method: Low Flow - Grundfos								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
1-19-12								
Method: Low Flow - Grundfos								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material								
Type: 2" Schedule 40 PVC								
See Low Flow Purge Sheet for Details								
Total Well Depth (TD):								
Static Water Level (WL): 42.49								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1215								
End Purge (hrs): 1415								
Total Purge Time (min): 120								
Total Vol. Purged (gal): 14.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L amber glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	--
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
TOC	H2SO4	3 40-mL amber glass vials	--

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit result → 0.00 mg/L (without Acid added)
 → 0.00 mg/L (with Acid Added)

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):



LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWIRP Bethpage Site 1
PROJECT NUMBER: 112G02230

WELL ID.: BPSI-TT-MW303II
DATE: 1-19-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1205	42.49	-	-	-	-	-	-	-	-	Initial
1215	42.52	300	9.74	0.213	305	0.94	14.13	140	-	cloudy (brown)
1220	42.52	300	9.75	0.210	300	0.51	15.20	113	-	" "
1225	42.52	300	9.75	0.209	313	0.42	15.50	90	-	" "
1230	42.52	325	9.74	0.208	339	0.41	15.68	65	-	" "
1235	42.52	325	9.71	0.208	415	0.39	15.77	49	-	" "
1240	42.52	325	9.71	0.208	430	0.42	15.83	43	-	" "
1245	42.52	300	9.72	0.208	432	0.44	15.59	37	-	" "
1250	42.52	300	9.69	0.207	450	0.41	15.51	29	-	" "
1255	42.52	300	9.69	0.207	433	0.37	15.60	21	-	" "
1300	42.52	300	9.69	0.207	419	0.34	15.62	16	-	" "
1305	42.52	300	9.69	0.207	399	0.38	15.75	8	-	" "
1310	42.52	300	9.70	0.207	404	0.31	15.80	3	-	" "
1315	42.52	300	9.69	0.207	397	0.28	15.82	-2	-	" "
1320	42.52	300	9.67	0.207	362	0.30	15.90	-6	-	" "
1325	42.52	300	9.67	0.207	390	0.27	15.92	-11	-	" "
1330	42.52	300	9.67	0.206	400	0.25	15.91	-12	-	" "
1335	42.52	300	9.64	0.206	377	0.21	15.90	-13	-	" "
1340	42.52	300	9.62	0.206	390	0.19	15.87	-14	-	" "
1345	42.52	300	9.60	0.206	400	0.17	15.88	-18	-	" "
1350	42.52	300	9.60	0.205	311	0.15	15.88	-24	-	" "
1355	42.52	300	9.61	0.205	314	0.16	15.91	-28	-	" "
1400	42.52	300	9.61	0.205	338	0.13	15.87	-30	-	" "
1405	42.52	300	9.61	0.206	342	0.09	15.86	-32	-	" "
1410	42.52	300	9.61	0.206	348	0.08	15.83	-31	-	" "
1415	42.52	300	9.61	0.206	339	0.07	15.81	-32	-	" " collect sample.

SIGNATURE(S):

PAGE 1 OF 1



GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW30312-01192012
 Sample Location: BPS1-TT-MW30312

Sampled By: J. Birkett
 C.O.C. No.: _____

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

Type of Sample:
☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

Date: <u>1-19-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1307</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>5.64</u>	<u>0.124</u>	<u>14.26</u>	<u>2.19</u>	<u>4.71</u>	<u>0.01</u>	<u>191</u>

PURGE DATA:

Date: <u>1-19-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>---</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): <u>42.82</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1200</u>								
End Purge (hrs): <u>1307</u>								
Total Purge Time (min): <u>67</u>								
Total Vol. Purged (gal/L): <u>3 gal</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>yes</u>
PCBs	--	2 1-L amber glass vials	<u>yes</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>yes</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>yes</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>no</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>no</u>

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.01 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:

NWIRP Bethpage Site 1

WELL ID.:

BPSI-TT-MW303I 2

PROJECT NUMBER:

112G02230

DATE:

1-19-12

[illegible]

SIGNATURE(S):

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GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW3SD-01192012

Sample Location: BPS1-TT-MW303D

Sampled By: J. Birkett

C.O.C. No.:

Type of Sample:

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type:
☐ QA Sample Type:

- ☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

Date: 1-19-12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: 1452	clear	6.10	0.199	14.07	15.6	5.39	0.01	165
Method: Low Flow - Grundfos								

PURGE DATA:

Date: 1-19-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): 42.96								
One Casing Volume(gal/L): --								
Start Purge (hrs): 1340								
End Purge (hrs): 1452								
Total Purge Time (min): 72								
Total Vol. Purged (gal/L): 13 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	yes
PCBs	--	2 1-L amber glass vials	yes
Hexavalent Chromium	--	1 250-mL plastic bottle	no
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	yes
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	no
TOC	H2SO4	3 40-mL amber glass vials	no

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.00 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):



BPSI-TT-MW303D

1-19-12

[illegible]

SIGNATURE(S): John B. Smith



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW304# - 01182012Sample Location: BPS1-TT-MW304#Sampled By: VAS

C.O.C. No.: _____

Type of Sample:

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-18-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1045</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>5.45</u>	<u>0.002</u>	<u>17.30</u>	<u>0.1</u>	<u>10.54</u>	<u>—</u>	<u>293</u>

PURGE DATA:

Date: <u>1-18-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>54'</u>								
Static Water Level (WL): <u>45.96'</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>0945</u>								
End Purge (hrs): <u>1045</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal/L): <u>6.0</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>—</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>—</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>—</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit result → 0.00 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:

NWIRP Bethpage Site 1

WELL ID.:

BPSI-TT-MW304\$

PROJECT NUMBER:

112G02230

DATE:

1-18-12

[illegible]

SIGNATURE(S):

W. J. P. J.

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Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name:	NWIRP Bethpage Site 1	Sample ID No.:	BPS1-TR-MW304II-01182012
Project No.:	112G02230	Sample Location:	BPS1-TR-MW304II
<input type="checkbox"/> Domestic Well Data		Sampled By:	VAS
<input checked="" type="checkbox"/> Monitoring Well Data		C.O.C. No.:	
<input type="checkbox"/> Other Well Type:		Type of Sample:	
<input type="checkbox"/> QA Sample Type:		<input checked="" type="checkbox"/> Low Concentration	
		<input type="checkbox"/> High Concentration	

SAMPLING DATA:

Date:	1-18-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time:	1225	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos		clear	6.67	0.114	15.12	9.2	7.54	-	209

PURGE DATA:

Date:	1-18-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos									
Monitor Reading (ppm):	0.0								
Well Casing Diameter & Material									
Type: 2" Schedule 40 PVC	See Low Flow Purge Sheet for Details								
Total Well Depth (TD):	113'								
Static Water Level (WL):	46.22'								
One Casing Volume(gal/L):	--								
Start Purge (hrs):	1125								
End Purge (hrs):	1225								
Total Purge Time (min):	60								
Total Vol. Purged (gal/L):	6.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	3
PCBs	--	2 1-L amber glass vials	2
Hexavalent Chromium	--	1 250-mL plastic bottle	1
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	1
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	-
TOC	H2SO4	3 40-mL amber glass vials	-

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit results → 0.04 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:

NWIRP Bethpage Site 1

WELL ID.:

BPSI-TT-MW304II

PROJECT NUMBER:

112G02230

DATE:

1-18-12

[illegible]

SIGNATURE(S):

[Signature]

PAGE 1 OF 1



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW304I2-01182012Sample Location: BPS1-TT-MW304I2Sampled By: VAS

C.O.C. No.: _____

Type of Sample: _____

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-18-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1400</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>5.55</u>	<u>0.073</u>	<u>14.51</u>	<u>1.8</u>	<u>8.33</u>	<u>--</u>	<u>286</u>

PURGE DATA:

Date: <u>1-18-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>151</u>								
Static Water Level (WL): <u>46.40'</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1300</u>								
End Purge (hrs): <u>1400</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal/L): <u>6.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>6</u>
PCBs	--	2 1-L amber glass vials	<u>4</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>2</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>2</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>-</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>-</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit results → 0.18 mg/L

Circle if Applicable:

MS/MSD

-

Duplicate ID No.:

BPS1-TT-Dup02-01182012

(Time → 1600 hrs)

Signature(s):

VAS



1-18-12

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GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW309D-01192012Sample Location: BPS1-TT-MW309DSampled By: J. Birkett

C.O.C. No.: _____

Type of Sample: _____

☒ Low Concentration☐ High Concentration

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

SAMPLING DATA:

Date: <u>1-19-12</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: <u>1117</u>	<u>Clear</u>	<u>5.85</u>	<u>0.122</u>	<u>14.64</u>	<u>11.1</u>	<u>7.91</u>	<u>0.01</u>	<u>190</u>
Method: <u>Low Flow - Grundfos</u>								

PURGE DATA:

Date: <u>1-19-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: <u>Low Flow - Grundfos</u>								
Monitor Reading (ppm): <u>---</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): <u>1015</u> ^{1015.1-1015.2} <u>46.59</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1015</u>								
End Purge (hrs): <u>1017</u>								
Total Purge Time (min): <u>62</u>								
Total Vol. Purged (gal/L): <u>8 gal</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>yes</u>
PCBs	--	2 1-L amber glass vials	<u>yes</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>no</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>yes</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>no</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>no</u>

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.00 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



NWIRP Bethpage Site 1

BPSI-TT-MW304D

112G02230

DATE:

1-19-12

SIGNATURE(S):

S): John B. Smith



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1Project Site Name: NWIRP Bethpage Site 1Project No.: 112G02230Sample ID No.: BPS1-TT-MW3055-01172012Sample Location: BPS1-TT-MW3055Sampled By: J. Birkett

C.O.C. No.: _____

Type of Sample: _____

☐ Domestic Well Data☒ Monitoring Well Data☐ Other Well Type: _____☐ QA Sample Type: _____☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-17-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1050</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>5.74</u>	<u>0.06</u>	<u>13.10</u>	<u>3.62</u>	<u>10.01</u>	<u>0.00</u>	<u>215</u>

PURGE DATA:

Date: <u>1-17-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): _____								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>49.74</u>								
Static Water Level (WL): <u>42.91</u>								
One Casing Volume(gal/L): --								
Start Purge (hrs): <u>1000</u>								
End Purge (hrs): <u>1050</u>								
Total Purge Time (min): <u>50</u>								
Total Vol. Purged (gal/L): <u>13.5-1</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>yes</u>
PCBs	--	2 1-L amber glass vials	<u>yes</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>no</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>yes</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>no</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>no</u>

OBSERVATIONS / NOTES:

No stains, odors, or elevated PID readings

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.00 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.:

1200
BPS1-Dup01-01172012

Signature(s):



NWIRP Bethpage Site 1

WELL ID.:

BPSI-TT-MW305S

112G02230

DATE:

1-17-12

SIGNATURE(S): Julia B. Smith

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:

NWIRP Bethpage Site 1

WELL ID.:

BFSI-TT-MW305 \$

PROJECT NUMBER:

112G02230

DATE:

1-16-2012

[illegible]

SIGNATURE(S):

PAGE 1 OF 1



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW305I-01172012Sample Location: BPS1-TT-MW 305ISampled By: J. Burke H

C.O.C. No.: _____

Type of Sample: _____

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-17-2012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1158</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>5.51</u>	<u>0.231</u>	<u>16.06</u>	<u>19.2</u>	<u>8.00</u>	<u>0.01</u>	<u>217</u>

PURGE DATA:

Date: <u>1-17-2012</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>—</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): <u>43.41</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1103</u>								
End Purge (hrs): <u>1158</u>								
Total Purge Time (min): <u>55</u>								
Total Vol. Purged (gal/L): <u>10 gal</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>yes</u>
PCBs	--	2 1-L amber glass vials	<u>yes</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>no</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>yes</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>no</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>no</u>

OBSERVATIONS / NOTES:

No stains or odor

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.00 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



RPSL-TT-MW305I

DATE:

1-17-12

SIGNATURE(S):

PAGE 7 OF 7



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW305D-01172012Sample Location: BPS1-TT-MW305DSampled By: J. Birkett

C.O.C. No.: _____

Type of Sample:

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-17-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1446</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>6.48</u>	<u>0.148</u>	<u>13.42</u>	<u>33.4</u>	<u>5.73</u>	<u>0.0</u>	<u>179</u>

PURGE DATA:

Date: <u>1-17-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): <u>43.57</u>								
One Casing Volume(gal/L): --								
Start Purge (hrs): <u>1350</u>								
End Purge (hrs): <u>1446</u>								
Total Purge Time (min): <u>56</u>								
Total Vol. Purged (gal/L): <u>6 gal</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>yes</u>
PCBs	--	2 1-L amber glass vials	<u>yes</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>yes</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>yes</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>no</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>no</u>

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.00mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



BPSI-TT-MW305D

1-17-12

SIGNATURE(S): *J. L. Smith*



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW3064-01232012Sample Location: BPS1-TT-MW3064Sampled By: VAS

C.O.C. No.: _____

Type of Sample:

☒ Low Concentration☐ High Concentration

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

SAMPLING DATA:

Date: <u>1-23-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1350</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>5.97</u>	<u>0.077</u>	<u>16.91</u>	<u>6.0</u>	<u>8.15</u>	<u>0</u>	<u>266</u>

PURGE DATA:

Date: <u>1-23-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>60'</u>								
Static Water Level (WL): <u>44.96'</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1250</u>								
End Purge (hrs): <u>1350</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal): <u>7.0</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>1</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>3</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.01 mg/LNo stains or odors observed

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



WELL ID.: BPS1-TT-MW306
DATE: 1-23-12

[illegible]

SIGNATURE(S):

PAGE 7 OF 7



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW306I-01232012Sample Location: BPS1-TT-MW306ISampled By: VAS

C.O.C. No.: _____

Type of Sample:

☒ Low Concentration☐ High Concentration

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

SAMPLING DATA:

Date: <u>1-23-12</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: <u>1210</u>	<u>clear</u>	<u>5.70</u>	<u>0.120</u>	<u>16.38</u>	<u>0.1</u>	<u>7.00</u>	<u>-</u>	<u>269</u>
Method: Low Flow - Grundfos								

PURGE DATA:

Date: <u>1-23-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>199'</u>								
Static Water Level (WL): <u>45.34'</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1110</u>								
End Purge (hrs): <u>1210</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal): <u>7.0</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>7</u>
PCBs	--	2 1-L amber glass vials	<u>6</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>1</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>-</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>3</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.00 Mg/LNo stains or odors observed

Circle if Applicable:

MS/MSD

Yes

Duplicate ID No.: _____

Signature(s):

Int AF



1-23-12

PAGE 7 OF 7



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW3060-01232012Sample Location: BPS1-TT-MW3060Sampled By: IAS

C.O.C. No.: _____

Type of Sample: _____

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-23-12</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	ORP (mV)
Time: <u>1035</u>	<u>clear</u>	<u>6.06</u>	<u>0.114</u>	<u>15.60</u>	<u>0.0</u>	<u>7.01</u>	<u>-</u>	<u>231</u>
Method: Low Flow - Grundfos								

PURGE DATA:

Date: <u>1-23-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>294'</u>								
Static Water Level (WL): <u>45.95'</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>0935</u>								
End Purge (hrs): <u>1035</u>								
Total Purge Time (min): <u>60</u>								
Total Vol. Purged (gal/L): <u>6.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>-</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>-</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>1</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.01 mg/LNo stains or odors observed

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

IAS



NWIRP Bethpage Site 1

BPS1-TT-MW306D

112G02230

DATE:

1-23-17

SIGNATURE(S): W. J. R.



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW3075-01182012Sample Location: BPS1-TT-MW3075Sampled By: J. Birkett

C.O.C. No.: _____

Type of Sample:

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

- ☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

Date: <u>1-18-2012</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1450</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>6.44</u>	<u>0.183</u>	<u>17.57</u>	<u>9.55</u>	<u>8.30</u>	<u>0.01</u>	<u>164</u>

PURGE DATA:

Date: <u>1-18-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD):								
Static Water Level (WL): <u>41.73</u>								
One Casing Volume(gal/L): --								
Start Purge (hrs): <u>1323</u>								
End Purge (hrs): <u>1450</u>								
Total Purge Time (min): <u>82</u>								
Total Vol. Purged (gal/L): <u>13 gal</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>yes 3</u>
PCBs	--	2 1-L amber glass vials	<u>yes 2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>no</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>yes 1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>no</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>no</u>

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.00 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

J. Birkett



NWIRP Bethpage Site 1

BPS1-TT-MW307S

112G02230

DATE: _____

1-18-12

SIGNATURE(S): Jul Bialik



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW307I 01182012Sample Location: BPS1-TT-MW 307JSampled By: A. B. Rickett

C.O.C. No.: _____

Type of Sample: _____

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

- ☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

Date: <u>1-18-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1232</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>5.77</u>	<u>0.186</u>	<u>13.96</u>	<u>12.2</u>	<u>365</u>	<u>0.1</u>	<u>166</u>

PURGE DATA:

Date: <u>1-18-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>198</u>								
Static Water Level (WL): <u>42.14</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1126</u>								
End Purge (hrs): <u>1232</u>								
Total Purge Time (min): <u>66</u>								
Total Vol. Purged (gal/L): <u>8.5 gal</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>yes 3</u>
PCBs	--	2 1-L amber glass vials	<u>yes 2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>yes 1</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>yes 1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>no</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>no</u>

OBSERVATIONS / NOTES:

No stains or odors
 Pump set within screened intervals ~2 feet off bottom
 Hexavalent Chromium Test Kit Result: 0.00 mg/L
Dup: 0.00 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



BPSI-TT-MW 307 I

1-18-12

SIGNATURE(S): John B. Smith



GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW307D01182012

Sample Location: BPS1-TT-MW307DSampled By: J. Birkett

C.O.C. No.: _____

Type of Sample: _____

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

- ☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

Date: <u>1-18-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1042</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>6.56</u>	<u>0.203</u>	<u>13.94</u>	<u>10.44</u>	<u>4.39</u>	<u>0.01</u>	<u>106</u>

PURGE DATA:

Date: <u>1-18-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>---</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>286</u>								
Static Water Level (WL): <u>42.62</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>0940</u>								
End Purge (hrs): <u>1042</u>								
Total Purge Time (min): <u>62</u>								
Total Vol. Purged (gal/L): <u>3 gal</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>yes 3</u>
PCBs	--	2 1-L amber glass vials	<u>yes 2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>no</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>yes 1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>no</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>no</u>

OBSERVATIONS / NOTES:

No stains or odors

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.0mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

J. Birkett



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1Project Site Name: NWIRP Bethpage Site 1Project No.: 112G02230Sample ID No.: BPS1-TT-MW308# 01/16/2012Sample Location: BPS1-TT-MW308#Sampled By: VAS

C.O.C. No.: _____

Type of Sample:

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-16-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1605</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>6.16</u>	<u>0.283</u>	<u>13.85</u>	<u>4.9</u>	<u>9.67</u>	<u>-</u>	<u>244</u>

PURGE DATA:

Date: <u>1-16-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>64'</u>								
Static Water Level (WL): <u>55.24'</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1510</u>								
End Purge (hrs): <u>1605</u>								
Total Purge Time (min): <u>55</u>								
Total Vol. Purged (gal/L): <u>6.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>7</u>
PCBs	--	2 1-L amber glass vials	<u>6</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>-</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>3</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>-</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>-</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result : 0.00 mg/L

Circle if Applicable:

MS/MSD

Yes

Duplicate ID No.: _____

Signature(s):

Van R. A. R.

LOW FLOW PURGE DATA SHEET



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW308I-01162012Sample Location: BPS1-TT-MW308ISampled By: VAS

C.O.C. No.: _____

Type of Sample:

☒ Low Concentration☐ High Concentration

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

SAMPLING DATA:

Date: <u>1-16-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1440</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>5.88</u>	<u>0.312</u>	<u>14.29</u>	<u>7.2</u>	<u>4.11</u>	<u>-</u>	<u>241</u>

PURGE DATA:

Date: <u>1-16-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2" Schedule 40 PVC</u>	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>166'</u>								
Static Water Level (WL): <u>55.69'</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1330</u>								
End Purge (hrs): <u>1440</u>								
Total Purge Time (min): <u>70</u>								
Total Vol. Purged (gal/L): <u>7.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>-</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>-</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>-</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.00 mg/L

Circle if Applicable:

MS/MSD

-

Duplicate ID No.:

-

Signature(s):



1-16-12

[illegible]

SIGNATURE(S): 

PAGE 1 OF 1



Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1
 Project No.: 112G02230

Sample ID No.: BPS1-TT-MW3030-01162012Sample Location: BPS1-TT-MW3030Sampled By: VAS

C.O.C. No.: _____

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

Type of Sample:

☒ Low Concentration☐ High Concentration

SAMPLING DATA:

Date: <u>1-16-12</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Time: <u>1230</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	(mV)
Method: Low Flow - Grundfos	<u>clear</u>	<u>5.99</u>	<u>0.170</u>	<u>14.51</u>	<u>6.5</u>	<u>5.24</u>	<u>—</u>	<u>221</u>

PURGE DATA:

Date: <u>1-16-12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Method: Low Flow - Grundfos								
Monitor Reading (ppm): <u>0.0</u>								
Well Casing Diameter & Material								
Type: <u>2</u> " Schedule 40 PVC	See Low Flow Purge Sheet for Details							
Total Well Depth (TD): <u>260'</u>								
Static Water Level (WL): <u>53.30'</u>								
One Casing Volume(gal/L): <u>--</u>								
Start Purge (hrs): <u>1115</u>								
End Purge (hrs): <u>1230</u>								
Total Purge Time (min): <u>75</u>								
Total Vol. Purged (gal/L): <u>7.0</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl	3 40-mL clear glass vials	<u>3</u>
PCBs	--	2 1-L amber glass vials	<u>2</u>
Hexavalent Chromium	--	1 250-mL plastic bottle	<u>—</u>
Total Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>1</u>
Filtered Metals (Total Cr and Fe)	HNO3	1 500-mL plastic bottle	<u>—</u>
TOC	H2SO4	3 40-mL amber glass vials	<u>—</u>

OBSERVATIONS / NOTES:

Pump set within screened intervals ~2 feet off bottom

Hexavalent Chromium Test Kit Result: 0.01 mg/L

Circle if Applicable:

MS/MSD

—

Duplicate ID No.:

—

Signature(s):

VAS



NWIRP Bethpage Site 1

GPS1-TT-MW308.D

112G02230

1-16-12

SIGNATURE(S): Lee H. H.



GROUNDWATER SAMPLE LOG SHEET

Page 1 of 1

- 0110 2012

Project Site Name: SITE 1 PCB INVES.
 Project No.: 112402230

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

Sample ID No.: BPS1-TT-MW095
 Sample Location: BPS1-TT-MW095
 Sampled By: SJC
 C.O.C. No.: 1106
 Type of Sample:
☐ Low Concentration
☐ High Concentration

SAMPLING DATA:

Date: <u>1/10/12</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: <u>1500</u>								
Method: <u>SUB PUMP</u>	<u>CLEAR</u>	<u>6.52</u>	<u>317</u>	<u>17.11</u>	<u>41</u>	<u>3.54</u>	<u>02</u>	<u>155</u>

PURGE DATA:

Date: <u>1/10/12</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>2" SUB</u>								
Monitor Reading (ppm): <u>0</u>								
Well Casing Diameter & Material								
Type: <u>2" PVC</u>								
Total Well Depth (TD): <u>65.00</u>	<u>TPVC</u>							
Static Water Level (WL): <u>56.00</u>	<u>TPVC</u>							
One Casing Volume (gal/L):								
Start Purge (hrs): <u>1230</u>								
End Purge (hrs): <u>1500</u>								
Total Purge Time (min): <u>150</u>								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC ^s	HCL/4°C	3- 40 ml VIALS	✓
PCB ^s	4°C	2- 1L AMBER	✓
TAL METALS (T)	HNO ₃ /4°C	1- 250 ml PE (500ml)	✓
TAL METALS (D)	HNO ₃ /4°C	1- 250ml PE (500 mL)	✓
HEX CR.	4°C	1- 250ml PE	✓
TOC	H ₂ SO ₄ /4°C	3- 40 ml VIALS	NO
		(8) TOTAL	

OBSERVATIONS / NOTES:

SCREEN 53-63 BGS.

AVE FLOW 300 ml/min

- Repurge well on 1-24-12 to conduct Hexavalent Chromium Test Kit analysis. Well purged for 60 minutes at 400 mL/min.
- Hexavalent Chromium Test Kit Result → 0.01 mg/L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

SJ Conte

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:
PROJECT NUMBER:

SITE 1 PCB INVES
112GD2230

WELL ID.:
DATE:

MW
BPSI-TT-3095
1/10/12

[illegible]

SIGNATURE(S):

2 Conti

PAGE 1 OF 1



Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

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01/11/2012

Project Site Name: SITE 1 PCB INVESTIGATION
 Project No.: 112G02230

Sample ID No.: 1 BPS1-TT-MW-309I-
 Sample Location: BPS1-TT-MW 309I
 Sampled By: SJC

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type: _____
☐ QA Sample Type: _____

C.O.C. No.: 1107
 Type of Sample:
☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

SAL.

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
1/11/12	CLEAR	5.62	312	15.48	5.91	5.58	213	0.01 %

PURGE DATA:

Date:	1/11/12							
Method:	2" GRUNDFOS							
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:	2" ϕ PVC							
Total Well Depth (TD):	~172'	TPVC						
Static Water Level (WL):	56.70	TPVC						
One Casing Volume (gal/L):								
Start Purge (hrs):	0900							
End Purge (hrs):	1000							
Total Purge Time (min):	60							
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	3-40ml Glass Vials	✓
PCBs	4 DEG C	2-1L Amber	✓
TAL METALS TOT Cr and Fe (Total)	HNO3/4 DEG C	1-500ml PE	✓
TAL METALS TOT Cr and Fe (Dissolved)	HNO3/4 DEG C	1-500ml PE	—
HEX CHROME	4 DEG C	1-250ml PE	✓
TOC	H2SO4/4 DEG C	3-40ml Amber Glass Vials	—

OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft



1-24-12 Hex Chrom test kit result = 0.12 mg/L
 w/o acid in blank
 = 0.06 mg/L with acid in blank

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

SJC Conti



SITE 1 PCB

112G02230

BPSI-TT-MW309I

1/11/12

1-24-12

2): John B. Smith for SC

PAGE OF



Tetra Tech, Inc.

GROUNDWATER SAMPLE LOG SHEET

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0112012

Project Site Name: **SITE 1 PCB INVESTIGATION**
 Project No.: **112G02230**

Sample ID No.: **BPS1-TT-MW 309D ~**
 Sample Location: **BPS1-TT-MW**
 Sampled By: **SJC**

- ☐ Domestic Well Data
☒ Monitoring Well Data
☐ Other Well Type:
☐ QA Sample Type:

C.O.C. No.: **1107**
 Type of Sample:
☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

SAL

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
1 / 11 / 12								
1410								
Method: 2" GRUNDFOS	V. SL	6.00	~267	15.10	62.8	0.00	124	0.01%

PURGE DATA:

TURBID

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	mV	NA
1/11/12								
Method: 2" GRUNDFOS								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type: 2" φ PVC								
Total Well Depth (TD): ~264	TPVC							
Static Water Level (WL): 56.59	TPVC							
One Casing Volume(gal/L):								
Start Purge (hrs): 1200								
End Purge (hrs): 1410								
Total Purge Time (min): 130								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION: Strike thru analysis not required

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL/4 DEG C	3- 40ml Glass Vials	✓
PCBs	4 DEG C	2-1L Amber	✓
TAL METALS TOT Cr and Fe (Total)	HNO3/4 DEG C	1-500ml PE	✓
TAL METALS TOT Cr and Fe (Dissolved)	HNO3/4 DEG C	1-500ml PE	✓
HEX CHROME	4 DEG C	1-250ml PE	✓
TOC	H2SO4/4 DEG C	3-40ml Amber Glass Vials	✓

OBSERVATIONS / NOTES:

2" MW = 0.163 gal/ft

252-262 SCREEN BGS

1-24-12
0830

Hex Chrom test kit result = 0.00 mg/L

Jed Bala

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

J. Conti



SITE 1 PCB

112GD2230

BPSI-TR-MW309D

1/11/12

1-24-12

SIGNATURE(S): SG Contr

QA Sample Logs



Project Site Name: NWIRP Bethpage Site 1

Sample ID Number: BPS1-TB01-01162012

Project Number: 112G02230

Sampled By: JB/Lab

Sample Location: Site 4

C.O.C. Number: _____

QA Sample Type:

☒ Trip Blank☐ Rinsate Blank☐ Source Water Blank☐ Other Blank _____**SAMPLING DATA:**

Date:

1-16-12

Time:

0935

Method:

Lab prepared

WATER SOURCE:☒ Laboratory Prepared☐ Tap☐ Purchased☐ Fire Hydrant☐ Other _____**PURCHASED WATER INFORMATION
(If Applicable as Source or Rinsate Water):**

Product Name: _____

Supplier: _____

Manufacturer: _____

Order Number: _____

Lot Number: _____

Expiration Date: _____

**RINSATE INFORMATION
(If Applicable):**

Media Type: _____

Equipment Used: _____

Equipment Type: _____

☐ Dedicated☐ Reusable**SAMPLE COLLECTION INFORMATION:**

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	2 40-mL clear glass vials	<input checked="" type="checkbox"/> YES / NO
PCBs	Cool 4°C	2 1-L amber glass bottles	YES / NO
TAL Metals	Cool 4°C & HNO ₃	1 500-mL plastic bottle	YES / NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES / NO
TOC	Cool 4°C & H ₂ SO ₄	3 40-mL amber glass vials	YES / NO

OBSERVATIONS / NOTES:

Signature(s):



QA SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1

Sample ID Number: BPS1-TB02-01182012

Project Number: 112G02230

Sampled By: Lab

Sample Location: _____

C.O.C. Number: _____

QA Sample Type: _____

☒ Trip Blank☐ Rinsate Blank☐ Source Water Blank☐ Other Blank _____

SAMPLING DATA:

Date: 1-18-2012

Time: 0800

Method: Lab prepared

WATER SOURCE:

☒ Laboratory Prepared☐ Tap☐ Purchased☐ Fire Hydrant☐ Other _____PURCHASED WATER INFORMATION
(If Applicable as Source or Rinsate Water):

Product Name: _____

Supplier: _____

Manufacturer: _____

Order Number: _____

Lot Number: _____

Expiration Date: _____

RINSATE INFORMATION
(If Applicable):

Media Type: _____

Equipment Used: _____

Equipment Type: _____

☐ Dedicated☐ Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	3 40-mL clear glass vials	YES / <u>NO</u>
PCBs	Cool 4°C	2 1-L amber glass bottles	YES / <u>NO</u>
TAL Metals	Cool 4°C & HNO ₃	1 500-mL plastic bottle	YES / <u>NO</u>
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES / <u>NO</u>
TOC	Cool 4°C & H ₂ SO ₄	3 40-mL amber glass vials	YES / <u>NO</u>

OBSERVATIONS / NOTES:

Signature(s):



Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: NWIRP Bethpage Site 1

Project Number: 112G02230

Sample Location: Lab prep'd

QA Sample Type:

Sample ID Number: BPS1-TB03-01192012

Sampled By: JB/Lab

C.O.C. Number:

☒ Trip Blank☐ Source Water Blank☐ Rinsate Blank☐ Other Blank

SAMPLING DATA:

Date: 1-19-12
Time: 0745
Method: Lab prepared

WATER SOURCE:

☒ Laboratory Prepared ☐ Tap
☐ Purchased ☐ Fire Hydrant
☐ OtherPURCHASED WATER INFORMATION
(If Applicable as Source or Rinsate Water):Product Name: _____
Supplier: _____
Manufacturer: _____
Order Number: _____
Lot Number: _____
Expiration Date: _____RINSATE INFORMATION
(If Applicable):Media Type: _____
Equipment Used: _____
Equipment Type: _____
☐ Dedicated
☐ Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	2 x 40-mL clear glass vials	YES / NO
PCBs	Cool 4°C	2 1-L amber glass bottles	YES / NO
TAL Metals	Cool 4°C & HNO ₃	1 500-mL plastic bottle	YES / NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES / NO
TOC	Cool 4°C & H ₂ SO ₄	3 40-mL amber glass vials	YES / NO

OBSERVATIONS / NOTES:

Signature(s):



Project Site Name: NWIRP Bethpage Site 1

Project Number: 112G02230

Sample Location: Site 4 / Lab

QA Sample Type:

Sample ID Number: BPS1-TB04-01202012

Sampled By: JB

C.O.C. Number:

☒ Trip Blank☐ Rinsate Blank☐ Source Water Blank☐ Other Blank

SAMPLING DATA:

Date: 10-20-12
Time: 0730
Method: Lab prepared

WATER SOURCE:

☒ Laboratory Prepared ☐ Tap
☐ Purchased ☐ Fire Hydrant
☐ OtherPURCHASED WATER INFORMATION
(If Applicable as Source or Rinsate Water):Product Name:
Supplier:
Manufacturer:
Order Number:
Lot Number:
Expiration Date:RINSATE INFORMATION
(If Applicable):Media Type:
Equipment Used:
Equipment Type:
☐ Dedicated
☐ Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	2 40-mL clear glass vials	YES / NO
PCBs	Cool 4°C	2 1-L amber glass bottles	YES / NO
TAL Metals	Cool 4°C & HNO ₃	1 500-mL plastic bottle	YES / NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES / NO
TOC	Cool 4°C & H ₂ SO ₄	3 40-mL amber glass vials	YES / NO

OBSERVATIONS / NOTES:

Signature(s):



QA SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: <u>NW18 Bethpage</u>		Sample ID Number: <u>BPSI-TB05-01232012</u>	
Project Number: <u>112G02230</u>		Sampled By: <u>JB/Lab</u>	
Sample Location: <u>Site 4/Lab</u>		C.O.C. Number: _____	
QA Sample Type:			
<input checked="" type="checkbox"/> Trip Blank		<input type="checkbox"/> Rinsate Blank	
<input type="checkbox"/> Source Water Blank		<input type="checkbox"/> Other Blank _____	
SAMPLING DATA:		WATER SOURCE:	
Date: <u>1-23-12</u>		<input checked="" type="checkbox"/> Laboratory Prepared	
Time: <u>0730</u>		<input type="checkbox"/> Tap	
Method: <u>Lab prepared</u>		<input type="checkbox"/> Purchased	
		<input type="checkbox"/> Fire Hydrant	
		<input type="checkbox"/> Other _____	
PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):		RINSATE INFORMATION (If Applicable):	
Product Name: _____		Media Type: _____	
Supplier: _____		Equipment Used: _____	
Manufacturer: _____		Equipment Type:	
Order Number: _____		<input type="checkbox"/> Dedicated	
Lot Number: _____		<input type="checkbox"/> Reusable	
Expiration Date: _____			
SAMPLE COLLECTION INFORMATION:			
Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	<u>2 40 mL glass vials</u>	<input checked="" type="checkbox"/> YES / <input type="checkbox"/> NO
Semivolatiles	Cool 4°C		YES / <input checked="" type="checkbox"/> NO
Pesticide / PCB	Cool 4°C		YES / <input checked="" type="checkbox"/> NO
Metals	Cool 4°C & HNO ₃		YES / <input checked="" type="checkbox"/> NO
Cyanide	Cool 4°C & NaOH		YES / <input checked="" type="checkbox"/> NO
OBSERVATIONS / NOTES:			
Signature(s): <u>[Signature]</u>			



Project Site Name: NWIRP Bethpage Site 1

Project Number: 112G02230

Sample Location: Field office

QA Sample Type:

Sample ID Number: BPS1-FB01-01182012

Sampled By: VAS and JB

C.O.C. Number:

☐ Trip Blank
☒ Source Water Blank☐ Rinsate Blank
☐ Other Blank

SAMPLING DATA:

Date: 1-18-12
Time: 0810
Method: Direct Pour

WATER SOURCE:

☐ Laboratory Prepared
☒ Purchased
☐ Other
☐ Tap
☐ Fire HydrantPURCHASED WATER INFORMATION
(If Applicable as Source or Rinsate Water):Product Name: Distilled Water
Supplier: Stop & Shop
Manufacturer: OS waters of America
Order Number: -
Lot Number: -
Expiration Date: 1-12-14RINSATE INFORMATION
(If Applicable):Media Type: _____
Equipment Used: _____
Equipment Type: _____
☐ Dedicated
☐ Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	3 40-mL clear glass vials	(YES) NO
PCBs	Cool 4°C	2 1-L amber glass bottles	(YES) NO
TAL Metals	Cool 4°C & HNO ₃	1 500-mL plastic bottle	(YES) NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	(YES) NO
TOC	Cool 4°C & H ₂ SO ₄	3 40-mL amber glass vials	YES / (NO)
TAL Metals (dissolved)	Cool 4°C + HNO ₃	1 500 mL plastic	(yes)

OBSERVATIONS / NOTES:

Signature(s):



QA SAMPLE LOG SHEET

Page ___ of ___

Project Site Name:	<u>NWIRP Bethpage</u>	Sample ID Number:	<u>BPS1-FB02-01232012</u>
Project Number:	<u>112G02230</u>	Sampled By:	<u>J. Birke</u>
Sample Location:	<u>Main Building near</u>	C.O.C. Number:	
QA Sample Type:	<u>Grate</u>		
<input type="checkbox"/> Trip Blank		<input type="checkbox"/> Rinsate Blank	
<input checked="" type="checkbox"/> Source Water Blank		<input type="checkbox"/> Other Blank	

SAMPLING DATA:	WATER SOURCE:	
Date: <u>1-23-12</u>	<input type="checkbox"/> Laboratory Prepared	<input checked="" type="checkbox"/> Tap
Time: <u>1430</u>	<input type="checkbox"/> Purchased	<input type="checkbox"/> Fire Hydrant
Method: <u>Direct Pour</u>	<input type="checkbox"/> Other	

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):	RINSATE INFORMATION (If Applicable):
Product Name: _____	Media Type: _____
Supplier: _____	Equipment Used: _____
Manufacturer: _____	Equipment Type: _____
Order Number: _____	<input type="checkbox"/> Dedicated
Lot Number: _____	<input type="checkbox"/> Reusable
Expiration Date: _____	

SAMPLE COLLECTION INFORMATION:			
Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	3 40 mL glass vials	<u>YES</u> / NO
Semivolatiles <u>Hexavalent Chrom.</u>	Cool 4°C	1 250 mL poly bottle	<u>YES</u> / NO
Pesticide / PCB	Cool 4°C	2 1 L amber glass bottles	<u>YES</u> / NO
Metals (<u>Fe & Cr</u>)	Cool 4°C & HNO ₃	1 500 mL poly bottle	<u>YES</u> / NO
Cyanide	Cool 4°C & NaOH		YES <u>NO</u>

OBSERVATIONS / NOTES:

Direct fill from hose in main building.
Water used for decon.
Hex. Chrom. Test Kit Result: 0.00mg/L

Signature(s):



Project Site Name: NWIRP Bethpage Site 1	Sample ID Number: BPS1-RB01-01182012
Project Number: 112G02230	Sampled By: VAS and JB
Sample Location: Field office	C.O.C. Number: _____
QA Sample Type:	
<input type="checkbox"/> Trip Blank	<input checked="" type="checkbox"/> Rinsate Blank
<input type="checkbox"/> Source Water Blank	<input type="checkbox"/> Other Blank _____

SAMPLING DATA:	WATER SOURCE:
Date: 1-18-12	<input type="checkbox"/> Laboratory Prepared <input type="checkbox"/> Tap
Time: 0820	<input checked="" type="checkbox"/> Purchased <input type="checkbox"/> Fire Hydrant
Method: Direct pour	<input type="checkbox"/> Other _____
PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):	RINSATE INFORMATION (If Applicable):
Product Name: Distilled Water	Media Type: Aqueous
Supplier: Stop & Shop	Equipment Used: Redi-Flow pump
Manufacturer: DeWaters of America	Equipment Type: <input type="checkbox"/> Dedicated
Order Number: _____	<input checked="" type="checkbox"/> Reusable
Lot Number: _____	
Expiration Date: 1-12-14	

SAMPLE COLLECTION INFORMATION:			
Analysis	Preservative	Container Requirements	Collected
Volatiles	Cool 4°C & HCl	3 40-mL clear glass vials	YES/ NO
PCBs	Cool 4°C	2 1-L amber glass bottles	YES/ NO
TAL Metals	Cool 4°C & HNO ₃	1 500-mL plastic bottle	YES/ NO
Hexavalent Chromium	Cool 4°C	1 250-mL plastic bottle	YES/ NO
TOC	Cool 4°C & H ₂ SO ₄	3 40-mL amber glass vials	YES/ NO
TAL Metals (dissolved)	Cool 4°C + HNO ₃	1 500 mL plastic	yes

OBSERVATIONS / NOTES:
- water poured over cleaned Redi-Flow pump directly into sample bottles
Signature(s):



QA SAMPLE LOG SHEET

Page 1 of 1

Project Site Name: <u>NWIRP Bethpage</u>		Sample ID Number: <u>BPSI-RB02-01232012</u>		
Project Number: <u>112602230</u>		Sampled By: <u>J. Birkett</u>		
Sample Location: _____		C.O.C. Number: _____		
QA Sample Type:				
<input type="checkbox"/> Trip Blank		<input checked="" type="checkbox"/> Rinsate Blank		
<input type="checkbox"/> Source Water Blank		<input type="checkbox"/> Other Blank _____		
SAMPLING DATA:		WATER SOURCE:		
Date: <u>1-23-12</u>		<input type="checkbox"/> Laboratory Prepared		<input type="checkbox"/> Tap
Time: <u>1330</u>		<input checked="" type="checkbox"/> Purchased		<input type="checkbox"/> Fire Hydrant
Method: <u>Direct pour over pump</u>		<input type="checkbox"/> Other _____		
PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):		RINSATE INFORMATION (If Applicable):		
Product Name: <u>Aradon Distilled Water</u>		Media Type: <u>Aqueous</u>		
Supplier: <u>Stop N Shop</u>		Equipment Used: <u>Grundfos Rediflo</u>		
Manufacturer: <u>DS Waters of America Inc.</u>		Equipment Type:		
Order Number: _____		<input type="checkbox"/> Dedicated		
Lot Number: _____		<input checked="" type="checkbox"/> Reusable		
Expiration Date: <u>1-12-14</u>				
SAMPLE COLLECTION INFORMATION:				
Analysis	Preservative	Container Requirements	Collected	
Volatiles	Cool 4°C & HCl	3 40 mL glass vials	YES/NO	
Semivolatiles <u>PCBs</u>	Cool 4°C	2 1 L Amber bottles	YES/NO	
Pesticide/PCB	Cool 4°C		YES/NO	
Metals (<u>Fet Cr</u>)	Cool 4°C & HNO ₃	1 25 500mL poly bottle	YES/NO	
Cyanide	Cool 4°C & NaOH		YES/NO	
Hexavalent Chrom	Cool 4°C	1 250mL poly bottle	yes	
OBSERVATIONS / NOTES:				
Poured DI water over deconned grundfos Hex Chrom Test Kit Result: 0.00mg/L				
Signature(s): 				

Groundwater Level Measurement Sheets



Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NWIRP Bethpage Site 1 GW Sampling **Project No.:** 112G02230
Location: Site 1 - Former Drum Marshalling Area **Personnel:** J. Birkett, V. Shickora
Weather Conditions: High 40° sunny breezy **Measuring Device:**
Tidally Influenced: Yes ___ No X **Remarks:**

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
BPS1-FW-MW01	1-24-12	1450		63.47	52.25			
BPS1-FW-MW02		1443		64.18	52.89			
BPS1-FW-MW03		1446		67	51.39			
BPS1-HN-MW-29I		1545		130.5	42.15			
BPS1-HN-MW-29D		1546			42.33			
BPS1-TT-MW301S		1438		62	51.24			
BPS1-TT-MW301I		1436		141	51.81 51.08			
BPS1-TT-MW301D		1435		221	51.08 51.81			
BPS1-TT-MW302S		1504		53.65	42.38			
BPS1-TT-MW302I1		1507		121	42.43			
BPS1-TT-MW302I2		1501		151	42.69			
BPS1-TT-MW302D		1500		218	42.96			
BPS1-TT-MW303S		1512		55.84	42.13			
BPS1-TT-MW303I1		1510		106	42.50			
BPS1-TT-MW303I2		1508		157	42.84			
BPS1-TT-MW303D		1506		228	43.01			
BPS1-TT-MW304S		1544		54	46.03			
BPS1-TT-MW304I1		1543		113	46.26			
BPS1-TT-MW304I2		1541		150.3	46.45			
BPS1-TT-MW304D		1540		191	46.60			
BPS1-TT-MW305S		1514			42.96			
BPS1-TT-MW305I		1516			43.55			
BPS1-TT-MW305D		1517			43.78			
BPS1-TT-MW306S		1530			44.90			Slip coupling loose but tightened
BPS1-TT-MW306I	✓	1528			45.34			

* All measurements to the nearest 0.01 foot

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NWIRP Bethpage Site 1 GW Sampling

Project No.: 112G02230

Location: Site 1 - Former Drum Marshalling Area

Personnel: J. Birkett, V. Shickora

Weather Conditions:

Measuring Device: _____

Tidally Influenced: Yes ____ No X

Remarks:

[illegible]

* All measurements to the nearest 0.01 foot

Surface Water Sample Log Sheets



Project Site Name: NWIRP Bethpage Site 1
Project No.: 112602230

Sample ID No.: BPSI-SW3002
Sample Location: BPSI-SW3002
Sampled By: J. Ferguson
C.O.C. No.: _____

- ☐ Stream
☐ Spring
☐ Pond
☐ Lake
☒ Other:
☐ QA Sample Type:

Storm Water Outfall

Type of Sample:

- ☒ Low Concentration
☐ High Concentration

SAMPLING DATA:

Date: <u>10-19-2011</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP (mv)
Time: <u>1130</u>	<u>Clear</u>	<u>6.65</u>	<u>0.245</u>	<u>17.67</u>	<u>0.0</u>	<u>5.03</u>	<u>-</u>	<u>192</u>
Depth: <u>—</u>								
Method: <u>Direct Pour</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>TCL VOCs</u>	<u>HCl</u>	<u>3 40mL glass vials</u>	<u>yes</u>
<u>PCBs</u>	<u>—</u>	<u>2 1L amber bottle</u>	<u>yes</u>
<u>Total/Hexavalent Chromium</u>	<u>HNO₃</u>	<u>1 500mL poly bottle</u>	<u>yes</u>

OBSERVATIONS / NOTES:**MAP:**

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):

Jim Ferguson
for Jim Ferguson

Appendix B

Survey Data



BANC3, Inc.
Consulting Engineers
www.banc3.com

- Engineers
- Surveyors
- Construction Managers
- Information Technology

300 Alexander Park, Suite 350
Princeton, NJ 08540
609.759.1900 phone
609.919.9022 fax

February 14, 2012

Robert Sok, P.G.
Project Manager / Geologist
Tetra Tech NUS, Inc.
Twin Oaks I, Suite 309
5700 Lake Wright Drive
Norfolk, VA 23502

Re.: Survey Report
US Navy – NWIRP
Bethpage, New York
Subcontract # 1080854
Job # 112G02230 – CTO WE44
BANC3 Project # 2000215-04

Dear Mr. Sok,

Per your request, I have enclosed three signed and sealed copies of our Survey Report dated February 14, 2012 for the above captioned project. Two copies have been bound and one copy is provided unbound, for your use.

We appreciate the opportunity to work with Tetra Tech NUS, Inc. and the US Navy. Please contact me if you have any questions and/or require additional information.

Respectfully submitted,

Thomas F. Miller, PLS, PP



BANC3, Inc.
Consulting Engineers
www.banc3.com

- Engineers
- Surveyors
- Construction Managers
- Information Technology

300 Alexander Park, Suite 350
Princeton, NJ 08540
609.759.1900 phone
609.919.9022 fax

Survey Report
U.S. Navy – NWIRP
Bethpage, New York
Subcontract # 1080854
Job # 112G02230 – CTO WE44
BANC3 Project # 2000215-04
February 14, 2012



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February 14, 2012

Robert Sok, P.G.
Project Manager / Geologist
Tetra Tech NUS, Inc.
Twin Oaks I, Suite 309
5700 Lake Wright Drive
Norfolk, VA 23502

Re.: Survey Report
US Navy – NWIRP
Bethpage, New York
Subcontract # 1080854
Job # 112G02230 – CTO WE44
BANC3 Project # 2000215-04

Dear Mr. Sok,

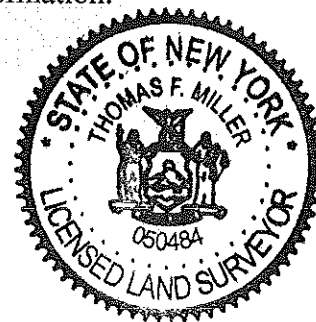
BANC3 Inc. is pleased to provide you with our completed Survey Report for the above referenced project.

BANC3 performed field surveys relative to the subject project to include Global Positioning Systems (GPS), conventional Total Station Surveys and differential leveling surveys. From the data, a table of Monitoring Well and Soil Boring Locations was prepared and included herein. The table includes control points utilized, locations and elevations of Monitoring Well cover, inner casing and adjacent ground where appropriate and Soil Boring locations and elevations. BANC3 performed field reconnaissance and locations of survey control markers tied National Geodetic Survey (NGS) monument designated as "15E 14N" (PID # KU5039) included herein. BANC3 verified the positioning and accuracy of the Monitoring Wells and Soil Borings through our ground field locations and redundant measurements of survey control points. All locations are referenced to New York State Plane Coordinates (Long Island Zone), North American Datum of 1983 and elevations referenced to North American Vertical Datum of 1988. (NAD83, NAVD 88).

We appreciate the opportunity to work with your organization and the US Navy. Please contact me if you have any questions and/or require additional information.

Respectfully submitted,

Thomas F. Miller, PLS, PP
State of New York Professional Land Surveyor #050484



BETHPAGE, NEW YORK / JANUARY 26, 2012

MONITORING WELL & SOIL VAPOR EXTRACTION WELL LOCATIONS

DESCRIPTION	GRID NORTH (US FT)	GRID EAST (US FT)	ELEV (US FT)	PT #
GPS MON	214296.002	1125124.594	122.84	15E14N
CIP / CONTROL POINT	214063.933	1123668.505	123.38	1
MW301S	214560.160	1124865.210	126.40	1574
INNER CASING	214560.546	1124865.178	126.00	1575
GROUND	214559.968	1124864.936	126.38	1576
MW301D	214562.161	1124880.995	126.33	1578
INNER CASING	214562.630	1124881.106	125.93	1579
GROUND	214561.885	1124881.124	126.32	1577
MW301I	214565.915	1124905.714	126.09	1580
INNER CASING	214566.352	1124906.082	125.56	1581
GROUND	214565.459	1124905.933	126.04	1582
MW305S	213411.314	1123930.003	116.49	1538
INNER CASING	213411.021	1123930.127	116.04	1539
GROUND	213409.185	1123930.184	116.52	1529
MW305D	213406.292	1123949.047	116.28	1534
INNER CASING	213405.975	1123949.183	115.94	1535
GROUND	213404.255	1123948.903	116.25	1531
MW305I	213408.673	1123939.648	116.43	1537
INNER CASING	213408.557	1123939.487	116.16	1536
GROUND	213406.936	1123939.665	116.38	1530
MW306S	213383.396	1124387.860	118.48	1552
INNER CASING	213383.550	1124387.814	117.82	1551
GROUND	213383.190	1124388.302	115.33	1550
MW306D	213381.032	1124409.879	118.62	1546
INNER CASING	213380.799	1124409.899	118.06	1545
GROUND	213380.768	1124410.251	115.59	1544

DESCRIPTION	GRID NORTH (US FT)	GRID EAST (US FT)	ELEV (US FT)	PT #
MW306I	213381.956	1124399.469	118.56	1548
INNER CASING	213382.124	1124399.458	117.76	1547
GROUND	213381.577	1124399.699	115.45	1549
MW307S	213350.889	1124902.305	114.58	1562
INNER CASING	213350.824	1124901.871	114.39	1563
GROUND	213351.290	1124900.960	114.59	1561
MW307D	213357.390	1124926.585	114.85	1568
INNER CASING	213357.307	1124926.918	114.42	1569
GROUND	213357.831	1124925.942	114.85	1567
MW307I	213353.948	1124915.179	114.65	1565
INNER CASING	213353.775	1124914.838	114.16	1564
GROUND	213354.844	1124915.305	114.67	1566
MW308S	214978.217	1124909.927	131.58	1589
INNER CASING	214978.065	1124909.900	131.05	1588
GROUND	214977.778	1124910.412	128.586	1587
MW308D	214965.058	1124935.523	131.61	1595
INNER CASING	214965.082	1124935.463	130.98	1594
GROUND	214964.782	1124934.963	128.78	1593
MW308I	214972.536	1124923.282	131.51	1592
INNER CASING	214972.484	1124923.261	130.73	1591
GROUND	214972.278	1124923.640	128.58	1590
MW309S	215211.896	1124997.760	132.45	1602
INNER CASING	215212.060	1124997.916	131.77	1601
GROUND	215212.026	1124997.416	129.41	1600
MW309D	215208.337	1125028.364	132.14	1608
INNER CASING	215208.441	1125028.421	131.52	1607
GROUND	215208.448	1125028.046	129.42	1606
MW309I	215209.976	1125016.064	132.36	1605
INNER CASING	215209.932	1125016.144	131.83	1604
GROUND	215210.375	1125015.580	129.44	1603

DESCRIPTION	GRID NORTH (US FT)	GRID EAST (US FT)	ELEV (US FT)	PT #
SVE-107D	213936.763	1124748.817	115.77	1501
INNER CASING	213936.904	1124749.376	115.49	1502
GROUND	213935.960	1124748.782	115.70	1500
SVE-108D	213957.882	1124515.465	117.43	1504
INNER CASING	213957.528	1124515.629	117.01	1503
GROUND	213958.809	1124514.989	117.27	1505
SVE-109D	213976.646	1124241.948	117.94	1507
INNER CASING	213976.388	1124242.354	117.49	1508
GROUND	213978.450	1124242.971	117.78	1506
SVE-110D	213991.041	1123998.401	117.04	1510
INNER CASING	213990.593	1123998.498	116.36	1509
GROUND	213991.920	1123998.760	116.88	1511
SVE-111D	214044.084	1123802.414	122.59	1513
INNER CASING	214043.723	1123802.430	122.01	1514
GROUND	214045.635	1123802.456	122.39	1512

BANC3

Tetra Tech - Bethpage, NY

16 June 2011

INPUT

Geographic, NAD83

OUTPUT

State Plane, NAD83
3104 - New York Long Island, U.S. Feet

15E14N (KU5039)

1/1

Latitude: 40 45 13.49016
Longitude: 073 29 29.50713

Northing/Y: 214296.001
Easting/X: 1125124.593

Convergence: 0 19 57.29260

Scale Factor: 0.999996308

Remark: Prepared by: Thomas F. Miller, PLS, PP

Corpscon v6.0.1, U.S. Army Corps of Engineers

DERIVATION OF ORTHOMETRIC HEIGHT OF NATIONAL GEODETIC SURVEY
MONUMENT 15E 14N (PID # KU5039)

“It is a straightforward procedure to algebraically subtract an interpolated geoid height, N, from a GPS ellipsoidal height, h, to obtain an orthometric height, H:

$$H = h - N^{1}$$

For NGS Monument 15E 14N:

H = Orthometric Height (to be determined)

h = Ellipsoidal Height (6.331 meters) Adjusted 02/10/07

N = Geoid Height (-31.11 meters)

or

$$H = 6.331\text{m} - (-31.11\text{m})$$

$$H = 37.441\text{m (or 122.84 feet)}$$

¹ Converting GPS Height into NAVD88 Elevation with the GEOID96 Geoid Height Model, Dennis G. Milbert, Ph.D. and Dru A. Smith, Ph.D., National Geodetic Survey, NOAA

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5

1 National Geodetic Survey, Retrieval Date = FEBRUARY 14, 2012

KU5039 *****

KU5039 DESIGNATION - 15E 14N

KU5039 PID - KU5039

KU5039 STATE/COUNTY- NY/NASSAU

KU5039 USGS QUAD - HUNTINGTON (1979)

KU5039

KU5039 *CURRENT SURVEY CONTROL

KU5039

KU5039* NAD 83(2007)- 40 45 13.49016(N) 073 29 29.50713(W) ADJUSTED

KU5039* NAVD 88 - 37.4 (meters) 123. (feet) VERTCON

KU5039

KU5039 EPOCH DATE - 2002.00

KU5039 X - 1,374,891.931 (meters) COMP

KU5039 Y - -4,639,038.874 (meters) COMP

KU5039 Z - 4,141,749.994 (meters) COMP

KU5039 LAPLACE CORR- 4.02 (seconds) DEFLEC09

KU5039 ELLIP HEIGHT- 6.331 (meters) (02/10/07) ADJUSTED

KU5039 GEOID HEIGHT- -31.11 (meters) GEOID09

KU5039

KU5039 ----- Accuracy Estimates (at 95% Confidence Level in cm) -----

KU5039 Type PID Designation North East Ellip

KU5039

KU5039 NETWORK KU5039 15E 14N 1.29 1.12 2.78

KU5039

KU5039

KU5039.The horizontal coordinates were established by GPS observations

KU5039.and adjusted by the National Geodetic Survey in February 2007.

KU5039

KU5039.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).

KU5039.See [National Readjustment](#) for more information.

KU5039

KU5039.The horizontal coordinates are valid at the epoch date displayed above

KU5039.which is a decimal equivalence of Year/Month/Day.

KU5039

KU5039.The NAVD 88 height was computed by applying the VERTCON shift value to

KU5039.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

KU5039

KU5039.The X, Y, and Z were computed from the position and the ellipsoidal ht.

KU5039

KU5039.The Laplace correction was computed from DEFLEC09 derived deflections.

KU5039

KU5039.The ellipsoidal height was determined by GPS observations

KU5039.and is referenced to NAD 83.

KU5039

KU5039.The geoid height was determined by GEOID09.

KU5039

KU5039; North East Units Scale Factor Converg.

KU5039;SPC NY L - 65,317.552 342,938.662 MT 0.99999631 +0 19 57.3

KU5039;SPC NY L - 214,296.00 1,125,124.59 sFT 0.99999631 +0 19 57.3

KU5039;UTM 18 - 4,512,515.673 627,337.852 MT 0.99979958 +0 59 05.6


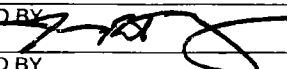
KU5039
 KU5039! - Elev Factor x Scale Factor = Combined Factor
 KU5039!SPC NY L - 0.99999901 x 0.99999631 = 0.99999532
 KU5039!UTM 18 - 0.99999901 x 0.99979958 = 0.99979859
 KU5039
 KU5039: Primary Azimuth Mark Grid Az
 KU5039:SPC NY L - 15E 14N AZ 093 49 50.7
 KU5039:UTM 18 - 15E 14N AZ 093 10 42.4
 KU5039
 KU5039|-----|
 KU5039| PID Reference Object Distance Geod. Az |
 KU5039| | | | dddmmss.s |
 KU5039| KU5058 15E 14N AZ APPROX. 0.6 KM 0940948.0 |
 KU5039|-----|
 KU5039
 KU5039 SUPERSEDED SURVEY CONTROL
 KU5039
 KU5039 ELLIP H (12/03/02) 6.339 (m) GP() 4 2
 KU5039 NAD 83(1996)- 40 45 13.48989(N) 073 29 29.50681(W) AD() 1
 KU5039 ELLIP H (01/11/99) 6.342 (m) GP() 4 1
 KU5039 NAD 83(1996)- 40 45 13.49288(N) 073 29 29.50569(W) AD() 1
 KU5039 NAD 83(1992)- 40 45 13.49274(N) 073 29 29.50540(W) AD() 1
 KU5039 NAD 83(1986)- 40 45 13.49343(N) 073 29 29.50648(W) AD() 1
 KU5039 NGVD 29 (03/24/92) 37.8 (m) 124. (f) GPS OBS
 KU5039
 KU5039.Superseded values are not recommended for survey control.
 KU5039.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 KU5039.See file dsdata.txt to determine how the superseded data were derived.
 KU5039
 KU5039_U.S. NATIONAL GRID SPATIAL ADDRESS: 18TXL2733712515(NAD 83)
 KU5039
 KU5039_MARKER: DO = NOT SPECIFIED OR SEE DESCRIPTION
 KU5039_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+))
 KU5039_SP_SET: STAINLESS STEEL ROD IN SLEEVE
 KU5039_STAMPING: 15E14N
 KU5039_MARK LOGO: NYDPW
 KU5039_PROJECTION: RECESSED 8 CENTIMETERS
 KU5039_MAGNETIC: N = NO MAGNETIC MATERIAL
 KU5039_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD
 KU5039+STABILITY: POSITION/ELEVATION WELL
 KU5039_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 KU5039+SATELLITE: SATELLITE OBSERVATIONS - 1990
 KU5039_ROD/PIPE-DEPTH: 20.6 meters
 KU5039_SLEEVE-DEPTH : 1.52 meters
 KU5039
 KU5039 HISTORY - Date Condition Report By
 KU5039 HISTORY - 1990 MONUMENTED SBAS
 KU5039
 KU5039 STATION DESCRIPTION
 KU5039
 KU5039'DESCRIBED BY SIDNEY B BOWNE AND SON 1990
 KU5039'THE POINT IS LOCATED IN BETHPAGE, TOWN OF OYSTER BAY, 21 FEET (6.4 M)
 KU5039'SOUTH OF THE CENTERLINE OF SYCAMORE AVENUE AND 40 FEET (12.2 M) EAST
 KU5039'OF THE CENTERLINE OF NORTH 11TH STREET, IN THE CONCRETE SIDEWALK.
 KU5039'THE LOCATION TIES ARE 42.5 FEET (13.0 M) FROM THE CENTER OF THE
 KU5039'HYDRANT, 48.6 FEET (14.8 M) FROM THE CENTER OF THE SEWER MANHOLE AND
 KU5039'33.8 FEET (10.3 M) FROM THE NORTH WEST CORNER OF HOUSE NUMBER 207.

*** retrieval complete.

Elapsed Time = 00:00:03

Appendix C

Chain of Custody Forms and Analytical Results

PROJECT NO: 112600030		FACILITY: NORTH BRUNNAN BATTAL		PROJECT MANAGER Robert Sack		PHONE NUMBER 757-466-4704		LABORATORY NAME AND CONTACT: TRE-MATRIX - WMS Roundbush																							
SAMPLERS (SIGNATURE) 				FIELD OPERATIONS LEADER Jim Ferguson		PHONE NUMBER 410-496-9283		ADDRESS 5360 CORPORATE EXCHANGE COURT																							
				CARRIER/WAYBILL NUMBER FED EX AB # 8735 60121350				CITY, STATE Grand Rapids, MI 49512																							
STANDARD TAT <input type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day						CONTAINER TYPE PLASTIC (P) or GLASS (G)																									
						PRESERVATIVE USED																									
						TYPE OF ANALYSIS																									
						TLL VOL																									
						PEBS																									
						TOTAL/HR Chromium																									
						TOTAL/HR Chromium																									
						PEBS																									
						TEST GROUP																									
								COMMENTS																							
DATE YEAR TIME				LOCATION ID		TOP DEPTH (FT)		BOTTOM DEPTH (FT)		MATRIX (GW, SO, SW, SD, QC, ETC.)		COLLECTION METHOD GRAB (G) COMP (C)		No. OF CONTAINERS		TYPE OF ANALYSIS		TLL VOL		PEBS		TOTAL/HR Chromium		TOTAL/HR Chromium		PEBS		TEST GROUP		COMMENTS	
10/19 11:00				BP51-SW3001		SW 3001		—		—		SW		6		7		3		2		1		1		—		01		* NO CHROME 24 HR HOLD TIME	
10/19 11:30				BP51-SW3002		SW 3002		—		—		SW		6		7		3		2		1		1		—		01		* NO CHROME 24 HR HOLD TIME	
10/19 14:00				BP51-TT-MW309-1520		MW 309		15'		20'		SD		6		1		—		—		—		—		1		02			
10/19 13:45				BP51-TT-MW309-2025		MW 309		20'		25'		SD		6		1		—		—		—		—		1		02			
10/19 14:15				BP51-TT-MW309-1015		MW 309		10'		15'		SD		6		1		—		—		—		—		1		02			
10/19 13:15				BP51-TT-MW309-0005		MW 309		00'		05'		SD		6		1		—		—		—		—		1		02			
10/19 13:30				BP51-TT-MW309-0510		MW 309		05'		10'		SD		6		1		—		—		—		—		1		02			
10/19 0800				BP51-TT-TB1019		—										2		2										03		Added per Trnus (see 10/20/11)	
1. RELINQUISHED BY 				DATE 10/19/2011		TIME 16:00		1. RECEIVED BY JIM FERGUSON		DATE 10/19/2011		TIME 16:00		2. RECEIVED BY		DATE		TIME		3. RECEIVED BY		DATE 10/20/11		TIME 0705		COMMENTS					

E. 1201112

TETRA TECHNUS, INC.

CHAIN OF CUSTODY

NUMBER

№ 1106

PAGE 1 OF 1

PROJECT NO: 112G02230		FACILITY: SITE 1 PCB		PROJECT MANAGER ROB SOK		PHONE NUMBER 757 618 2104		LABORATORY NAME AND CONTACT: TRIMATRIX/WALT R.					
SAMPLERS (SIGNATURE) S Conti				FIELD OPERATIONS LEADER S CONTI		PHONE NUMBER 412 551 2629		ADDRESS 5560 CORPORATE EXC. COURT					
				CARRIER/WAYBILL NUMBER FED EX # 8735 5966 0542		CITY, STATE GRAND RAPIDS, MI. 49512							
STANDARD TAT <input checked="" type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day						CONTAINER TYPE PLASTIC (P) or GLASS (G)							
						PRESERVATIVE USED							
DATE YEAR 2012						TYPE OF ANALYSIS							
TIME						VOCs (40ml)							
SAMPLE ID						PCBS (11 Amber)							
LOCATION ID						TALMEALS							
						TOT Cr. Fe							
						HEX Cr.							
						TAL METALS							
						TOT Cr. Fe (DISS)							
						TEST GROUP							
						COMMENTS							
1. RELINQUISHED BY S Conti				DATE 1/10/12		TIME 1800		1. RECEIVED BY FED EX		DATE		TIME	
2. RELINQUISHED BY				DATE		TIME		2. RECEIVED BY		DATE		TIME	
3. RELINQUISHED BY				DATE		TIME		3. RECEIVED BY		DATE 1/11/12		TIME 0845	
COMMENTS * CALL ROB SOK FOR TAT. / ANALYZE HEX Cr. ASAP.													

00031

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03

**NUMBER**

№ 1107

PAGE 1 OF 1

49-2

[illegible]

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E-1201218

TETRA TECH NUS, INC.

CHAIN OF CUSTODY

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1167

PAGE

1 OF 1

9.5

PROJECT NO: 112602230		FACILITY: NWIRP Bethpage		PROJECT MANAGER Rob Sak		PHONE NUMBER 757-466-4904		LABORATORY NAME AND CONTACT: TriMatrix W. J. Roulebusch							
SAMPLERS (SIGNATURE) <i>John Birkett</i> <i>W. J. Roulebusch</i>				FIELD OPERATIONS LEADER Vince Shickora		PHONE NUMBER 610-909-1893		ADDRESS 5560 Corporate Exchange Court							
				CARRIER/WAYBILL NUMBER FedEx 8729-3229-8874		CITY, STATE Grand Rapids MI 49512									
STANDARD TAT <input checked="" type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day				TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)						
PRESERVATIVE USED															
DATE YEAR	TIME	SAMPLE ID	LOCATION ID						TYPE OF ANALYSIS				COMMENTS		
									VOCs	PCBs	Metals (Fe+Cr)	Hexavalent Cr.		TEST GROUP	
1	1-16 0935	BPSI-TB01-01162012	-	-	-	QC	-	2	2				04	Lab prepared	
2	1-16 1230	BPSI-TT-MW308D-01162012	-	-	-	GW	G	6	3	2	1		07		
3	1-16 1440	BPSI-TT-MW308I-01162012	-	-	-	GW	G	6	3	2	1		07		
4	1-16 1605	BPSI-TT-MW308S-01162012	-	-	-	GW	G	16	7	6	3		08	Run MSMSD	
5	1-17 0950	BPSI-TT-MW301D-01172012	-	-	-	GW	G	6	3	2	1		07		
6	1-17 1050	BPSI-TT-MW305S-01172012	-	-	-	GW	G	6	3	2	1		07		
7	1-17 1140	BPSI-TT-MW301S-01172012	-	-	-	GW	G	6	3	2	1		07		
8	1-17 1158	BPSI-TT-MW305I-01172012	-	-	-	GW	G	6	3	2	1		07		
9	1-17 1305	BPSI-TT-MW301I-01172012	-	-	-	GW	G	7	3	2	1	1	05		
10	1-17 1446	BPSI-TT-MW305D-01172012	-	-	-	GW	G	7	3	2	1	1	05		
11	1-17 1515	BPSI-FW-MW02-01172012	-	-	-	GW	G	6	3	2	1		07		
12	1-17 1200	BPSI-Dup 01-01172012	-	-	-	GW	G	6	3	2	1		09		
1. RELINQUISHED BY <i>John Birkett</i>				DATE 1-17-12		TIME 1720		1. RECEIVED BY				DATE		TIME	
2. RELINQUISHED BY				DATE		TIME		2. RECEIVED BY				DATE		TIME	
3. RELINQUISHED BY				DATE		TIME		3. RECEIVED BY <i>W. J. Roulebusch</i>				DATE 1/18/12		TIME 0845	
COMMENTS															

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Rack 306G 3 Cart 11

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NUMBER

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PAGE 1 OF 1

11-2

PROJECT NO: 112602230		FACILITY: NWIRP Bethpage		PROJECT MANAGER Rob Sok		PHONE NUMBER 757-466-4904		LABORATORY NAME AND CONTACT: Trimatrix Walt Roubush								
SAMPLERS (SIGNATURE) <i>Paul B. Smith</i> <i>Walt Roubush</i>				FIELD OPERATIONS LEADER Vince Shuckors		PHONE NUMBER 610-909-1893		ADDRESS 5560 Corporate Exchange Court SE								
				CARRIER/WAYBILL NUMBER FedEx 8729 3229 8680				CITY, STATE Grand Rapids, MI 49512								
STANDARD TAT <input checked="" type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day				CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED		<div style="display: flex; justify-content: space-between;"> <div> <p>TYPE OF ANALYSIS</p> <p>VOCs</p> <p>PCBs</p> <p>Total Metals (Fe, Cr)</p> <p>Filtered Dissolved Metals (Fe, Cu)</p> <p>Heterovalent Cr.</p> </div> <div> <p>TEST GROUP</p> </div> </div>								
DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS							COMMENTS	
1-18	0800	BPSI-TB02-01182012	1	1	1	QC	1	2	2						04	Lab prepared
1-18	0810	BPSI-FB01-01182012	1	1	1	QC	1	8	3	2	1	1	1		10	Field Blank
1-18	0820	BPSI-RB01-01182012	1	1	1	QC	1	8	3	2	1	1	1		11	Rinsate Blank over Groundfoc
1-18	1042	BPSI-TT-MW307D-01182012	1	1	1	GW	G	6	3	2	1				07	
1-18	1045	BPSI-TT-MW304S-01182012	1	1	1	GW	G	6	3	2	1				07	
1-18	1225	BPSI-TT-MW304I1-01182012	1	1	1	GW	G	7	3	2	1		1		05	
1-18	1232	BPSI-TT-MW307I-01182012	1	1	1	GW	G	7	3	2	1		1		05	
1-18	1400	BPSI-TT-MW304I2-01182012	1	1	1	GW	G	7	3	2	1		1		05	
1-18	1450	BPSI-TT-MW307S-01182012	1	1	1	GW	G	6	3	2	1				07	
1-18	1600	BPSI-TT-Dup02-01182012	1	1	1	GW	G	7	3	2	1		1		12	Duplicate
1. RELINQUISHED BY <i>Paul B. Smith</i>				DATE 1-18-2012		TIME 1700		1. RECEIVED BY <i>Walt Roubush</i>				DATE 1-19-12		TIME 0845		
2. RELINQUISHED BY				DATE		TIME		2. RECEIVED BY				DATE		TIME		
3. RELINQUISHED BY				DATE		TIME		3. RECEIVED BY				DATE		TIME		
COMMENTS																

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CHAIN OF CUSTODY

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No

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13.5

PROJECT NO: 112G02230		FACILITY: NWIRP Bethpage		PROJECT MANAGER Rob Sok		PHONE NUMBER 757-466-4904		LABORATORY NAME AND CONTACT: Tri Matrix White Roundbush										
SAMPLERS (SIGNATURE) <i>[Signature]</i>				FIELD OPERATIONS LEADER Vince Shickles		PHONE NUMBER 610-909-1893		ADDRESS 5560 Corporate Exchange Court SE										
				CARRIER/WAYBILL NUMBER FedEx 8729 3229 8679				CITY, STATE Grand Rapids, MI 49512										
				STANDARD TAT <input checked="" type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day														
DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)									
									PRESERVATIVE USED									
									TYPE OF ANALYSIS									
									VOC									
									PCB									
									Total Metals (Fe+Cu)									
									Filtered/Dissolved Metals (Fe+Cu)									
									Total Metals (Fe+Cu+Mn)									
									Hexavalent Chromium									
									TEST GROUP									
									COMMENTS									
1	1-19	0745	BPSI-TB03-01192012	-	-	-	QC	-	2	2						04	Lab Prepared	
2	1-19	0917	BPSI-HW-MW29I-01192012	-	-	-	GW	G	6	3	2			1			01	
3	1-19	0930	BPSI-FW-MW01-01192012	-	-	-	GW	G	6	3	2	1					07	
4	1-19	1110	BPSI-FW-MW03-01192012	-	-	-	GW	G	6	3	2	1					07	
5	1-19	1117	BPSI-TT-MW304D-01192012	-	-	-	GW	G	6	3	2	1					07	
6	1-19	1307	BPSI-TT-MW303I2-01192012	-	-	-	GW	G	7	3	2	1		1			05	
7	1-19	1415	BPSI-TT-MW303I1-01192012	-	-	-	GW	G	7	3	2	1	1				13	
8	1-19	1452	BPSI-TT-MW303D-01192012	-	-	-	GW	G	6	3	2	1					07	
9	1-19	1630	BPSI-Dup03-01192012	-	-	-	GW	G	6	3	2	1					09	Duplicate
1. RELINQUISHED BY <i>[Signature]</i>				DATE 1-19-12		TIME 1645		1. RECEIVED BY <i>[Signature]</i>				DATE		TIME				
2. RELINQUISHED BY				DATE		TIME		2. RECEIVED BY				DATE		TIME				
3. RELINQUISHED BY				DATE		TIME		3. RECEIVED BY <i>[Signature]</i>				DATE 1-20-12		TIME 0845				
COMMENTS																		

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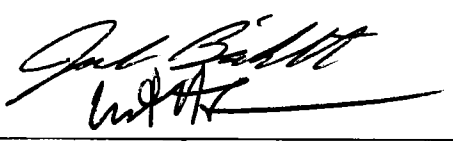

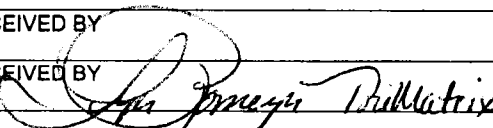
No

Rack # 160 Blue Part 2

1132

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15-7
TM 1395

PROJECT NO: 112G02230		FACILITY: NWIRP Bethpage		PROJECT MANAGER Rob Sak		PHONE NUMBER 757-846-4904		LABORATORY NAME AND CONTACT: Tri-Matrix Walt Roubush								
SAMPLERS (SIGNATURE) 				FIELD OPERATIONS LEADER Vince Shickora		PHONE NUMBER 610-909-1893		ADDRESS 5560 Corporate Exchange Court SE								
STANDARD TAT <input checked="" type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day				CARRIER/WAYBILL NUMBER FedEx 8729-3229-8830				CITY, STATE Grand Rapids, MI 49512								
				CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED		TYPE OF ANALYSIS		TEST GROUP		COMMENTS				
DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs	PCBs	Total Metals (Fe+Cr)	Total Metals (Fe, Cr, G, M)	HNO3 P	HNO3 P		
1-20	0730	BPSI-TB04-01202012	-	-	-	QC	-	2	2				04			Lab prepared
1-20	0920	BPSI-TT-MW302S-01202012	-	-	-	GW	G	6	3	2	1		07			
1-20	1000	BPSI-TT-MW302D-01202012	-	-	-	GW	G	6	3	2		1	01			
1-20	1045	BPSI-TT-MW302I1-01202012	-	-	-	GW	G	6	3	2	1		07			
1-20	1115	BPSI-TT-MW302I2-01202012	-	-	-	GW	G	6	3	2	1		07			
1. RELINQUISHED BY 				DATE 1-20-12		TIME 1400		1. RECEIVED BY				DATE		TIME		
2. RELINQUISHED BY				DATE		TIME		2. RECEIVED BY				DATE		TIME		
3. RELINQUISHED BY				DATE		TIME		3. RECEIVED BY 				DATE 1/21/12		TIME 0845		
COMMENTS																

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4/02R

FORM NO. TtNUS-001



NUMBER

Rack # 12, ~~777~~ "Cart 9"
2674 white PAGE

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19-3

PROJECT NO: 112G02230						FACILITY: <u>NWIRP Bethpage</u>								PROJECT MANAGER <u>Rob Sok</u>							PHONE NUMBER <u>757-466-4904</u>					LABORATORY NAME AND CONTACT: <u>TriMatrix Walt Roubelush</u>									
SAMPLERS (SIGNATURE) 														FIELD OPERATIONS LEADER <u>Vince Shickora</u>							PHONE NUMBER <u>610-909-1893</u>					ADDRESS <u>5560 Corporate Exchange Court SE</u>									
														CARRIER/WAYBILL NUMBER <u>FedEx 8749-3229-8841</u>							CITY, STATE <u>Grand Rapids, MI 49512</u>														
STANDARD TAT <input checked="" type="checkbox"/> RUSH TAT <input type="checkbox"/> <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day																					CONTAINER TYPE PLASTIC (P) or GLASS (G)														
																					PRESERVATIVE USED														
																					TYPE OF ANALYSIS														
																					TEST GROUP														
																					COMMENTS														
DATE YEAR TIME SAMPLE ID LOCATION ID TOP DEPTH (FT) BOTTOM DEPTH (FT) MATRIX (GW, SO, SW, SD, QC, ETC.) COLLECTION METHOD GRAP (G) COMP (C) No. OF CONTAINERS																																			
1-23 0730 BPSI-TB05-01232012 - 1 1 1 QC - 2 2														Lab prepared																					
1-23 1035 BPSI-TT-MW306D-01232012 - 1 1 1 GW G 9 3 2 1 3 14																																			
1-23 1049 BPSI-TT-MW303S-01232012 - 1 1 1 GW G 6 3 2 1 07																																			
1-23 1210 BPSI-TT-MW306I-01232012 - 1 1 1 GW G 18 7 6 1 1 3 15														Run MSMSD on everything except TOC																					
1-23 1230 BPSI-TT-MW301D-01232012 - 1 1 1 GW G 1 1 16																																			
1-23 1330 BPSI-RB02-01232012 - 1 1 1 QC - 7 3 2 1 1 17														Rinsate Blank																					
1-23 1350 BPSI-TT-MW306S-01232012 - 1 1 1 GW G 10 3 2 1 1 3 14 19																																			
1-23 1430 BPSI-FB02-01232012 - 1 1 1 QC - 7 3 2 1 1 18														Source Blank																					
1-23 1600 BPSI-DUP04-01232012 - 1 1 1 GW G 6 3 2 1 09																																			
1. RELINQUISHED BY														DATE 1-23-12 TIME							1. RECEIVED BY							DATE TIME							
2. RELINQUISHED BY														DATE TIME							2. RECEIVED BY							DATE TIME							
3. RELINQUISHED BY														DATE TIME							3. RECEIVED BY							DATE TIME							
COMMENTS																																			

DISTRIBUTION:

WHITE (ACCOMPANIES SAMPLE)

YELLOW (FIELD COPY)

PINK (FILE COPY)

4/02R

FORM NO. TINUS-001

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-03

File ID: 1201254-03.D

Sampled: 01/19/12 09:30

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 15:09

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	3.1	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	70	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	J
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-03

File ID: 1201254-03.D

Sampled: 01/19/12 09:30

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 15:09

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	230	0.16	0.50	1.0	E
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	8.3	0.14	0.50	1.0	
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	21	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	1.2	0.22	0.50	1.0	
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.3	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	40.0	100	85 - 120	
4-Bromofluorobenzene	40.0	37.7	94	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	524227	5.13	88	5.13	
Chlorobenzene-d5	490570	8.08	89	8.08	
1,4-Dichlorobenzene-d4	259473	10.38	81	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-03RE1

File ID: 1201254-03D.D

Sampled: 01/19/12 09:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 16:36

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	2	2.0	1.3	2.0	20	U
71-43-2	Benzene	2	1.0	0.23	1.0	2.0	U
74-97-5	Bromochloromethane	2	1.0	0.31	1.0	2.0	U
75-27-4	Bromodichloromethane	2	1.0	0.27	1.0	2.0	U
75-25-2	Bromoform	2	0.50	0.20	0.50	2.0	U
74-83-9	Bromomethane	2	1.0	0.56	1.0	2.0	U
75-15-0	Carbon Disulfide	2	1.0	0.37	1.0	10	U
56-23-5	Carbon Tetrachloride	2	1.0	0.29	1.0	2.0	U
108-90-7	Chlorobenzene	2	1.0	0.26	1.0	2.0	U
75-00-3	Chloroethane	2	1.0	0.30	1.0	2.0	U
67-66-3	Chloroform	2	1.0	0.32	1.0	2.0	U
74-87-3	Chloromethane	2	1.0	0.36	1.0	2.0	U
110-82-7	Cyclohexane	2	1.0	0.58	1.0	10	U
96-12-8	1,2-Dibromo-3-chloropropane	2	1.0	0.50	1.0	4.0	U
124-48-1	Dibromochloromethane	2	0.50	0.19	0.50	2.0	U
106-93-4	1,2-Dibromoethane	2	0.50	0.21	0.50	2.0	U
95-50-1	1,2-Dichlorobenzene	2	1.0	0.31	1.0	2.0	U
541-73-1	1,3-Dichlorobenzene	2	0.50	0.21	0.50	2.0	U
106-46-7	1,4-Dichlorobenzene	2	1.0	0.31	1.0	2.0	U
75-71-8	Dichlorodifluoromethane	2	1.0	0.50	1.0	2.0	U
75-34-3	1,1-Dichloroethane	2	3.0	0.39	1.0	2.0	
107-06-2	1,2-Dichloroethane	2	1.0	0.24	1.0	2.0	U
75-35-4	1,1-Dichloroethene	2	1.0	0.35	1.0	2.0	U
156-59-2	cis-1,2-Dichloroethene	2	64	0.34	1.0	2.0	
156-60-5	trans-1,2-Dichloroethene	2	1.0	0.23	1.0	2.0	U
78-87-5	1,2-Dichloropropane	2	1.0	0.29	1.0	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2	0.20	0.10	0.20	2.0	U
10061-02-6	trans-1,3-Dichloropropene	2	0.50	0.22	0.50	2.0	U
123-91-1	1,4-Dioxane	2	50	20	50	100	U
100-41-4	Ethylbenzene	2	0.50	0.21	0.50	2.0	U
591-78-6	2-Hexanone	2	1.0	0.48	1.0	10	U
98-82-8	Isopropylbenzene	2	1.0	0.34	1.0	2.0	U
79-20-9	Methyl Acetate	2	1.0	0.55	1.0	10	U
1634-04-4	Methyl tert-Butyl Ether	2	1.0	0.26	1.0	2.0	U
108-87-2	Methylcyclohexane	2	1.0	0.47	1.0	10	U
75-09-2	Methylene Chloride	2	1.0	0.69	1.0	2.0	U
78-93-3	2-Butanone (MEK)	2	1.0	0.56	1.0	10	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-03RE1

File ID: 1201254-03D.D

Sampled: 01/19/12 09:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 16:36

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	2	1.0	0.47	1.0	10	U
100-42-5	Styrene	2	0.20	0.11	0.20	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2	1.0	0.24	1.0	2.0	U
127-18-4	Tetrachloroethene	2	200	0.33	1.0	2.0	
108-88-3	Toluene	2	0.20	0.11	0.20	2.0	U
87-61-6	1,2,3-Trichlorobenzene	2	1.0	0.28	1.0	4.0	U
120-82-1	1,2,4-Trichlorobenzene	2	1.0	0.29	1.0	4.0	U
71-55-6	1,1,1-Trichloroethane	2	7.8	0.29	1.0	2.0	
79-00-5	1,1,2-Trichloroethane	2	1.0	0.30	1.0	2.0	U
79-01-6	Trichloroethene	2	20	0.37	1.0	2.0	
75-69-4	Trichlorofluoromethane	2	1.0	0.36	1.0	2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2	1.0	0.45	1.0	2.0	J
75-01-4	Vinyl Chloride	2	1.0	0.48	1.0	2.0	U
179601-23-1	Xylene, Meta + Para	2	1.0	0.57	1.0	4.0	U
95-47-6	Xylene, Ortho	2	0.50	0.21	0.50	2.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.6	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	493663	5.13	93	5.13	
Chlorobenzene-d5	472107	8.08	93	8.08	
1,4-Dichlorobenzene-d4	254308	10.38	86	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-03

File ID: A87 039-0

Sampled: 01/19/12 09:30

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 00:55

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.196	97	40 - 135	
Tetrachloro-m-xylene	0.202	0.169	84	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-03RE1

File ID: A87 372-0

Sampled: 01/19/12 09:30

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 02:18

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: 2B09039

Calibration: 2B09014

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.46	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.192	95	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-03

Sampled: 01/19/12 09:30

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	860	ug/L	8.1	10	20		01/30/12 14:25

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FW-MW01-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-03

Sampled: 01/19/12 09:30

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.4	ug/L	0.20	0.50	1.0		01/31/12 16:08

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-11

File ID: 1201218-11.D

Sampled: 01/17/12 15:15

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 13:46

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.35	0.13	0.50	1.0	J
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-11

File ID: 1201218-11.D

Sampled: 01/17/12 15:15

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 13:46

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	21	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.39	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.36	0.22	0.50	1.0	J
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.0	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	530321	5.13	89	5.13	
Chlorobenzene-d5	499909	8.08	90	8.08	
1,4-Dichlorobenzene-d4	268517	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-11

File ID: A87 022-0

Sampled: 01/17/12 15:15

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 18:02

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.184	91	40 - 135	
Tetrachloro-m-xylene	0.202	0.161	80	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO V

Matrix: Ground Water

Laboratory ID: 1201218-11RE1

File ID: A87 179-0

Sampled: 01/17/12 15:15

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 17:30

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201461

Sequence: 2B01038

Calibration: 2B01011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.30	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.188	93	40 - 135	
Tetrachloro-m-xylene	0.202	0.167	83	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-11

Sampled: 01/17/12 15:15

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	8.5	ug/L	0.20	0.50	1.0		01/31/12 15:36

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FW-MW02-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-11

Sampled: 01/17/12 15:15

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	330	ug/L	8.1	10	20		01/30/12 12:46

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-04

File ID: 1201254-04.D

Sampled: 01/19/12 11:10

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 15:37

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.49	0.17	0.50	1.0	J
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-04

File ID: 1201254-04.D

Sampled: 01/19/12 11:10

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 15:37

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	68	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.25	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	3.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.4	101	70 - 120	
Toluene-d8	40.0	40.6	102	85 - 120	
4-Bromofluorobenzene	40.0	37.7	94	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	525475	5.13	88	5.13	
Chlorobenzene-d5	499629	8.08	90	8.08	
1,4-Dichlorobenzene-d4	262518	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-04

File ID: A87 040-0

Sampled: 01/19/12 11:10

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 01:19

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.152	75	40 - 135	
Tetrachloro-m-xylene	0.202	0.131	65	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-04RE1

File ID: A87 374-0

Sampled: 01/19/12 11:10

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 03:07

Solids:

Preparation: 3510C Liquid-Liquid Exl

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: 2B09039

Calibration: 2B09014

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.9	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.189	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.152	75	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-04

Sampled: 01/19/12 11:10

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	110	ug/L	8.1	10	20		01/30/12 14:29

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FW-MW03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-04

Sampled: 01/19/12 11:10

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.6	ug/L	0.20	0.50	1.0		01/31/12 16:10

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-HN-MW291-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-02

File ID: 1201254-02.D

Sampled: 01/19/12 09:17

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 14:42

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-02

File ID: 1201254-02.D

Sampled: 01/19/12 09:17

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 14:42

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.49	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.5	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	511183	5.13	86	5.13	
Chlorobenzene-d5	481292	8.08	87	8.08	
1,4-Dichlorobenzene-d4	257465	10.38	80	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-02

File ID: A87 038-0

Sampled: 01/19/12 09:17

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 00:31

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.191	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.131	65	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECHNUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-02RE1

File ID: A87 371-0

Sampled: 01/19/12 09:17

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 01:54

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: 2B09039

Calibration: 2B09014

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.63	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.185	91	40 - 135	
Tetrachloro-m-xylene	0.202	0.126	62	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-02

Sampled: 01/19/12 09:17

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-70-2	Calcium, Total	1	24000	ug/L	230	500	500		01/30/12 14:21
7439-89-6	Iron, Total	1	83	ug/L	8.1	10	20		01/30/12 14:21
7440-23-5	Sodium, Total	1	7800	ug/L	130	500	500		01/30/12 14:21

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-HN-MW29I-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-02

Sampled: 01/19/12 09:17

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.5	ug/L	0.20	0.50	1.0		01/31/12 16:07

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-Dup03-01192012

BPS1-HN-MW29T

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-09

File ID: 1201254-09.D

Sampled: 01/19/12 16:30

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-Dup03-01192012

BPS1-HN-MW29T

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-09

File ID: 1201254-09.D

Sampled: 01/19/12 16:30

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.46	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	527482	5.13	88	5.13	
Chlorobenzene-d5	495899	8.08	90	8.08	
1,4-Dichlorobenzene-d4	264783	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-Dup03-01192012

BPS1-HN-MW221

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-09

File ID: A87 045-0

Sampled: 01/19/12 16:30

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 03:20

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.196	97	40 - 135	
Tetrachloro-m-xylene	0.202	0.178	88	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-Dup03-01192012

BPS1-HN-Mw29Z

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-09RE1

File ID: A87 385-0

Sampled: 01/19/12 16:30

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 07:34

Solids:

Preparation: 3510C Liquid-Liquid Exl

Initial/Final: 990 mL / 2 mL

QC Batch: 1201518

Sequence: 2B09039

Calibration: 2B09014

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.66	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.195	96	40 - 135	
Tetrachloro-m-xylene	0.202	0.176	87	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-Dup03-01192012

BPS1-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-09

Sampled: 01/19/12 16:30

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	93	ug/L	8.1	10	20		01/30/12 14:58

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-Dup03-01192012

BPS1-HN-MW29I

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-09

Sampled: 01/19/12 16:30

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.2	ug/L	0.20	0.50	1.0		01/31/12 16:15

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-07

File ID: 1201218-07.D

Sampled: 01/17/12 11:40

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 13:46

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-07

File ID: 1201218-07.D

Sampled: 01/17/12 11:40

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 13:46

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.3	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.3	103	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	561816	5.13	93	5.13	
Chlorobenzene-d5	537929	8.08	94	8.08	
1,4-Dichlorobenzene-d4	296519	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-07

File ID: A87 016-0

Sampled: 01/17/12 11:40

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 15:37

Solids:

Preparation: 3510C Liquid-Liquid Exl

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.182	89	40 - 135	
Tetrachloro-m-xylene	0.204	0.174	86	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-07RE1

File ID: A87_172-0

Sampled: 01/17/12 11:40

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 14:40

Solids:

Preparation: 3510C Liquid-Liquid Exl

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2B02020

Calibration: 2B02004

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	10	10	0.54	0.80	2.0	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-07

Sampled: 01/17/12 11:40

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	56	ug/L	8.1	10	20		01/30/12 12:30

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW301S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-07

Sampled: 01/17/12 11:40

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.5	ug/L	0.20	0.50	1.0		01/31/12 15:29

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW3011-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-09

File ID: 1201218-09.D

Sampled: 01/17/12 13:05

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 13:19

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-09

File ID: 1201218-09.D

Sampled: 01/17/12 13:05

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 13:19

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.4	101	85 - 120	
4-Bromofluorobenzene	40.0	38.5	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	516158	5.13	86	5.13	
Chlorobenzene-d5	479498	8.08	87	8.08	
1,4-Dichlorobenzene-d4	259720	10.38	81	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-09

File ID: A87 018-0

Sampled: 01/17/12 13:05

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 16:25

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.185	92	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-09RE1

File ID: A87 175-0

Sampled: 01/17/12 13:05

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 15:53

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201461

Sequence: 2B01016

Calibration: 2B01003

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.79	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.190	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.159	79	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-09

Sampled: 01/17/12 13:05

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	17	ug/L	8.1	10	20	J	01/30/12 12:38

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-09

Sampled: 01/17/12 13:05

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	7.0	ug/L	0.20	0.50	1.0		01/31/12 15:34

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW301I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-09

Sampled: 01/17/12 13:05

Prepared: 01/18/12 10:14

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201614

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	5.3	ug/L	0.3	1.0	1.0		01/18/12 10:40

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-05

File ID: 1201218-05.D

Sampled: 01/17/12 09:50

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 12:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.22	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-05

File ID: 1201218-05.D

Sampled: 01/17/12 09:50

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 12:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.26	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.14	0.057	0.10	1.0	J
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.53	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.6	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.9	102	85 - 115	
1,2-Dichloroethane-d4	40.0	39.5	99	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	567161	5.13	94	5.13	
Chlorobenzene-d5	534103	8.08	93	8.08	
1,4-Dichlorobenzene-d4	295193	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-05

File ID: A87 014-0

Sampled: 01/17/12 09:50

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 14:48

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.177	87	40 - 135	
Tetrachloro-m-xylene	0.204	0.154	75	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-05RE1

File ID: A87 170-0

Sampled: 01/17/12 09:50

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 13:52

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2B01016

Calibration: 2B01003

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.75	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.190	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.167	82	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-05

Sampled: 01/17/12 09:50

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	14	ug/L	8.1	10	20	J	01/30/12 12:21

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW301D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-05

Sampled: 01/17/12 09:50

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	92	ug/L	0.20	0.50	1.0		01/31/12 15:27

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW301D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-05

Sampled: 01/23/12 12:30

Prepared: 01/24/12 10:38

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201753

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	5	86.0	ug/L	1.5	5.0	5.0		01/24/12 11:25

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-02

File ID: 1201287-02.D

Sampled: 01/20/12 09:20

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 12:27

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-02

File ID: 1201287-02.D

Sampled: 01/20/12 09:20

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 12:27

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.5	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.4	99	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.6	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	514821	5.13	97	5.13	
Chlorobenzene-d5	484007	8.08	95	8.08	
1,4-Dichlorobenzene-d4	261639	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-02

File ID: A87 082-0

Sampled: 01/20/12 09:20

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 21:18

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 960 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.208	100	40 - 135	
Tetrachloro-m-xylene	0.208	0.176	85	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-02RE1

File ID: A87 281-0

Sampled: 01/20/12 09:20

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 02:03

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 960 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03005

Calibration: 2B03001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.43	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.193	93	40 - 135	
Tetrachloro-m-xylene	0.208	0.167	80	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-02

Sampled: 01/20/12 09:20

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	22	ug/L	8.1	10	20		01/30/12 15:02

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW302S-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-02

Sampled: 01/20/12 09:20

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.63	ug/L	0.20	0.50	1.0	J	01/31/12 16:21

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW30211-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-04

File ID: 1201287-04.D

Sampled: 01/20/12 10:45

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 13:22

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.45	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW30211-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-04

File ID: 1201287-04.D

Sampled: 01/20/12 10:45

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 13:22

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.29	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.35	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.0	100	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	492765	5.13	93	5.13	
Chlorobenzene-d5	466376	8.08	92	8.08	
1,4-Dichlorobenzene-d4	251538	10.38	85	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW30211-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-04

File ID: A87 084-0

Sampled: 01/20/12 10:45

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 22:07

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.209	102	40 - 135	
Tetrachloro-m-xylene	0.204	0.156	77	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW30211-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-04RE1

File ID: A87 283-0

Sampled: 01/20/12 10:45

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 02:51

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03005

Calibration: 2B03001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	1.2	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.191	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.150	73	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-04

Sampled: 01/20/12 10:45

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	34	ug/L	8.1	10	20		01/30/12 15:10

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW302I1-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-04

Sampled: 01/20/12 10:45

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.4	ug/L	0.20	0.50	1.0		01/31/12 16:23

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW30212-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-05

File ID: 1201287-05.D

Sampled: 01/20/12 11:15

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 13:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW30212-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-05

File ID: 1201287-05.D

Sampled: 01/20/12 11:15

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 13:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	39.8	99	70 - 120	
Toluene-d8	40.0	40.9	102	85 - 120	
4-Bromofluorobenzene	40.0	38.1	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	496718	5.13	94	5.13	
Chlorobenzene-d5	470247	8.08	93	8.08	
1,4-Dichlorobenzene-d4	255582	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW30212-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-05

File ID: A87 085-0

Sampled: 01/20/12 11:15

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 22:31

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.208	103	40 - 135	
Tetrachloro-m-xylene	0.202	0.163	81	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW30212-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-05RE1

File ID: A87 285-0

Sampled: 01/20/12 11:15

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 03:40

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03005

Calibration: 2B03001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.9	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.200	99	40 - 135	
Tetrachloro-m-xylene	0.202	0.154	76	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW302I2-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-05

Sampled: 01/20/12 11:15

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	59	ug/L	8.1	10	20		01/30/12 15:14

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW30212-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-05

Sampled: 01/20/12 11:15

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.1	ug/L	0.20	0.50	1.0		01/31/12 16:24

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-03

File ID: 1201287-03.D

Sampled: 01/20/12 10:00

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 12:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.62	0.17	0.50	1.0	J
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-03

File ID: 1201287-03.D

Sampled: 01/20/12 10:00

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 12:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.33	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.23	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	3.9	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.0	97	70 - 120	
Toluene-d8	40.0	40.5	101	85 - 120	
4-Bromofluorobenzene	40.0	38.5	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	504030	5.13	95	5.13	
Chlorobenzene-d5	470972	8.08	93	8.08	
1,4-Dichlorobenzene-d4	253629	10.38	86	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-03

File ID: A87_083-0

Sampled: 01/20/12 10:00

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 21:42

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 960 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.211	101	40 - 135	
Tetrachloro-m-xylene	0.208	0.163	78	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201287-03RE1

File ID: A87 282-0

Sampled: 01/20/12 10:00

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 02:27

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 960 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03005

Calibration: 2B03001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.85	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.192	92	40 - 135	
Tetrachloro-m-xylene	0.208	0.153	73	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-03

Sampled: 01/20/12 10:00

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-70-2	Calcium, Total	1	8000	ug/L	230	500	500		01/30/12 15:06
7439-89-6	Iron, Total	1	75	ug/L	8.1	10	20		01/30/12 15:06
7440-23-5	Sodium, Total	1	24000	ug/L	130	500	500		01/30/12 15:06

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW302D-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201287-03

Sampled: 01/20/12 10:00

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.3	ug/L	0.20	0.50	1.0		01/31/12 16:22

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-03

File ID: 1201310-03.D

Sampled: 01/23/12 10:49

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 14:45

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-03

File ID: 1201310-03.D

Sampled: 01/23/12 10:49

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 14:45

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.9	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.6	99	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.5	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	507152	5.13	96	5.13	
Chlorobenzene-d5	475239	8.08	94	8.08	
1,4-Dichlorobenzene-d4	257292	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-03

File ID: A87 087-0

Sampled: 01/23/12 10:49

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 23:19

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.208	103	40 - 135	
Tetrachloro-m-xylene	0.202	0.152	75	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-03RE1

File ID: A87 289-0

Sampled: 01/23/12 10:49

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 05:17

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B07033

Calibration: 2B03001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.21	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.189	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.143	71	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-03

Sampled: 01/23/12 10:49

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	66	ug/L	8.1	10	20		01/30/12 15:30

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW303S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-03

Sampled: 01/23/12 10:49

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.7	ug/L	0.20	0.50	1.0		01/31/12 16:26

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-Dup04-01232012

BPS1-TT-MW3035

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-09

File ID: 1201310-09.D

Sampled: 01/23/12 16:00

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 16:08

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-Dup04-01232012

BPS1-T7-MW303 S1

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-09

File ID: 1201310-09.D

Sampled: 01/23/12 16:00

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 16:08

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.8	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	40.9	102	85 - 120	
4-Bromofluorobenzene	40.0	37.9	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	484017	5.13	91	5.13	
Chlorobenzene-d5	461266	8.08	91	8.08	
1,4-Dichlorobenzene-d4	247962	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-Dup04-01232012

BPS1-TT-MW303,5

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-09

File ID: A87 094-0

Sampled: 01/23/12 16:00

Prepared: 01/25/12 08:27

Analyzed: 01/27/12 02:09

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.209	103	40 - 135	
Tetrachloro-m-xylene	0.202	0.171	85	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-Dup04-01232012

BPS1-TT-MW3035

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-09RE1

File ID: A87 294-0

Sampled: 01/23/12 16:00

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 07:18

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B07033

Calibration: 2B03001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.20	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.193	96	40 - 135	
Tetrachloro-m-xylene	0.202	0.164	81	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-Dup04-01232012

BPS1-TT-MW303S

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-09

Sampled: 01/23/12 16:00

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	210	ug/L	8.1	10	20		01/30/12 16:07

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-Dup04-01232012

BPS1-TT-MW3035

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-09

Sampled: 01/23/12 16:00

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.2	ug/L	0.20	0.50	1.0		01/31/12 16:42

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW30311-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-07

File ID: 1201254-07.D

Sampled: 01/19/12 14:15

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:00

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	1.6	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	1.6	0.17	0.50	1.0	
156-59-2	cis-1,2-Dichloroethene	1	2.0	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW30311-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-07

File ID: 1201254-07.D

Sampled: 01/19/12 14:15

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:00

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	83	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	18	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.0	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	514906	5.13	86	5.13	
Chlorobenzene-d5	488654	8.08	88	8.08	
1,4-Dichlorobenzene-d4	259158	10.38	81	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW30311-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-07

File ID: A87 043-0

Sampled: 01/19/12 14:15

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 02:32

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.195	94	40 - 135	
Tetrachloro-m-xylene	0.206	0.173	84	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW30311-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-07RE1

File ID: AFEB010-0

Sampled: 01/19/12 14:15

Prepared: 01/23/12 11:22

Analyzed: 02/09/12 14:22

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201518

Sequence: 2B09057

Calibration: 2B09015

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	3	3.9	0.19	0.24	0.60	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.225	109	40 - 135	
Tetrachloro-m-xylene	0.206	0.192	93	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-07

Sampled: 01/19/12 14:15

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	6000	ug/L	8.1	10	20		01/30/12 14:49

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-07

Sampled: 01/19/12 14:15

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: General Metals Prep

QC Batch: 1201623

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	70	ug/L	8.1	10	20		01/30/12 16:31

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-07

Sampled: 01/19/12 14:15

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.8	ug/L	0.20	0.50	1.0		01/31/12 16:13

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW303I1-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-07

Sampled: 01/19/12 14:15

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: General Metals Prep

QC Batch: 1201624

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	0.23	ug/L	0.20	0.50	1.0	J	01/31/12 15:08

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW30312-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-06

File ID: 1201254-06.D

Sampled: 01/19/12 13:07

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 16:32

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW30312-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-06

File ID: 1201254-06.D

Sampled: 01/19/12 13:07

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 16:32

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.94	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.6	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.4	101	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.1	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	510032	5.13	86	5.13	
Chlorobenzene-d5	480629	8.08	87	8.08	
1,4-Dichlorobenzene-d4	259640	10.38	81	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW30312-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-06

File ID: A87 042-0

Sampled: 01/19/12 13:07

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 02:08

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.215	104	40 - 135	
Tetrachloro-m-xylene	0.206	0.180	87	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW30312-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-06RE1

File ID: A87 378-0

Sampled: 01/19/12 13:07

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 04:44

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201518

Sequence: 2B09039

Calibration: 2B09014

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	2.4	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.214	104	40 - 135	
Tetrachloro-m-xylene	0.206	0.179	87	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-06

Sampled: 01/19/12 13:07

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	69	ug/L	8.1	10	20		01/30/12 14:45

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW303I2-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-06

Sampled: 01/19/12 13:07

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.4	ug/L	0.20	0.50	1.0		01/31/12 16:12

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW30312-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-06

Sampled: 01/19/12 13:07

Prepared: 01/20/12 10:46

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201627

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/20/12 11:15

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-08

File ID: 1201254-08.D

Sampled: 01/19/12 14:52

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:28

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-08

File ID: 1201254-08.D

Sampled: 01/19/12 14:52

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 17:28

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.51	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	530402	5.13	89	5.13	
Chlorobenzene-d5	497230	8.08	90	8.08	
1,4-Dichlorobenzene-d4	266672	10.38	83	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-08

File ID: A87 044-0

Sampled: 01/19/12 14:52

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 02:56

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 940 mL / 2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.085	0.057	0.085	0.21	U
11104-28-2	PCB-1221	1	0.085	0.048	0.085	0.21	U
11141-16-5	PCB-1232	1	0.085	0.044	0.085	0.21	U
12672-29-6	PCB-1248	1	0.085	0.058	0.085	0.21	U
11097-69-1	PCB-1254	1	0.085	0.057	0.085	0.21	U
11096-82-5	PCB-1260	1	0.085	0.031	0.085	0.21	U
37324-23-5	PCB-1262	1	0.085	0.085	0.085	0.21	U
11100-14-4	PCB-1268	1	0.085	0.042	0.085	0.21	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.213	0.210	99	40 - 135	
Tetrachloro-m-xylene	0.213	0.181	85	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECHNUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO V

Matrix: Ground Water

Laboratory ID: 1201254-08RE1

File ID: A87 384-0

Sampled: 01/19/12 14:52

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 07:10

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 940 mL / 2 mL

QC Batch: 1201518

Sequence: 2B09045

Calibration: 2B09015

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	2	1.6	0.13	0.17	0.43	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.213	0.213	100	40 - 135	
Tetrachloro-m-xylene	0.213	0.186	88	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-08

Sampled: 01/19/12 14:52

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	520	ug/L	8.1	10	20		01/30/12 14:54

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW303D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-08

Sampled: 01/19/12 14:52

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	5.3	ug/L	0.20	0.50	1.0		01/31/12 16:14

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-05

File ID: 1201244-05.D

Sampled: 01/18/12 10:45

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 12:23

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-05

File ID: 1201244-05.D

Sampled: 01/18/12 10:45

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 12:23

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	530181	5.13	89	5.13	
Chlorobenzene-d5	493846	8.08	89	8.08	
1,4-Dichlorobenzene-d4	269552	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-05

File ID: A87 027-0

Sampled: 01/18/12 10:45

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 20:04

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.205	99	40 - 135	
Tetrachloro-m-xylene	0.206	0.167	81	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-05

Sampled: 01/18/12 10:45

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	58	ug/L	8.1	10	20		01/30/12 13:14

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW304S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-05

Sampled: 01/18/12 10:45

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.4	ug/L	0.20	0.50	1.0		01/31/12 15:42

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW30411-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-06

File ID: 1201244-06.D

Sampled: 01/18/12 12:25

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 16:59

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	1.6	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	6.0	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW30411-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-06

File ID: 1201244-06.D

Sampled: 01/18/12 12:25

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 16:59

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	25	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	1.7	0.14	0.50	1.0	
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	4.1	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.0	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.7	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	550781	5.13	91	5.13	
Chlorobenzene-d5	528117	8.08	92	8.08	
1,4-Dichlorobenzene-d4	290850	10.38	86	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW30411-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-06

File ID: A87 028-0

Sampled: 01/18/12 12:25

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 20:28

Solids:

Preparation: 3510C Liquid-Liquid Exl

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.194	95	40 - 135	
Tetrachloro-m-xylene	0.204	0.161	79	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-06RE1

File ID: A87 277-0

Sampled: 01/18/12 12:25

Prepared: 01/23/12 11:04

Analyzed: 02/03/12 00:26

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2B03005

Calibration: 2B03001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.97	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.190	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.161	79	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW30411-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-06

Sampled: 01/18/12 12:25

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	400	ug/L	8.1	10	20		01/30/12 13:18

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-06

Sampled: 01/18/12 12:25

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	38	ug/L	0.20	0.50	1.0		01/31/12 15:43

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW304I1-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-06

Sampled: 01/18/12 12:25

Prepared: 01/19/12 10:34

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201625

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	2	35.5	ug/L	0.6	2.0	2.0		01/19/12 11:23

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-08

File ID: 1201244-08.D

Sampled: 01/18/12 14:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 17:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	2.7	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-08

File ID: 1201244-08.D

Sampled: 01/18/12 14:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 17:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	5.5	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.26	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.7	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	39.0	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	532905	5.13	88	5.13	
Chlorobenzene-d5	512136	8.08	89	8.08	
1,4-Dichlorobenzene-d4	285184	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TTMW-304I2-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO V

Matrix: Ground Water

Laboratory ID: 1201244-08

File ID: A87 032-0

Sampled: 01/18/12 14:00

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 22:05

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.178	88	40 - 135	
Tetrachloro-m-xylene	0.202	0.152	75	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TTMW-30412-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-08RE1

File ID: A87 239-0

Sampled: 01/18/12 14:00

Prepared: 01/23/12 11:04

Analyzed: 02/01/12 17:28

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201461

Sequence: 2B02024

Calibration: 2B01011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.5	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.160	79	40 - 135	
Tetrachloro-m-xylene	0.202	0.137	68	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

mmc
3/15/12

TT- MW30412-
BPS1-~~TTMW-30412-01182012~~

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-08

Sampled: 01/18/12 14:00

Prepared: 01/31/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201437

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	16	ug/L	8.1	10	20	J	02/01/12 10:34

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

MMC
3/15/12

BPS1-TT-MW30412-
BPS1-TTMW-30412-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-08

Sampled: 01/18/12 14:00

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201436

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	5	200	ug/L	0.98	2.5	5.0		01/31/12 16:43

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

-TT-MW304I2-
BPS1-TTMW-304I2-01182012

MMC
3/5/12

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-08

Sampled: 01/18/12 14:00

Prepared: 01/19/12 10:34

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201626

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	181	ug/L	0.3	1.0	1.0		01/19/12 11:43

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-Dup02-01182012

BPS1-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-10

File ID: 1201244-10.D

Sampled: 01/18/12 16:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 18:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	2.8	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-Dup02-01182012

BPS1-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-10

File ID: 1201244-10.D

Sampled: 01/18/12 16:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 18:50

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	5.5	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.23	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.6	102	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	540587	5.13	90	5.13	
Chlorobenzene-d5	516262	8.08	90	8.08	
1,4-Dichlorobenzene-d4	282850	10.38	83	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-Dup02-01182012

BPS1-TT-MW304T2

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-10

File ID: A87 034-0

Sampled: 01/18/12 16:00

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 22:53

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.182	90	40 - 135	
Tetrachloro-m-xylene	0.202	0.144	71	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-Dup02-01182012

BPS1-TT-MW30412

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-10RE1

File ID: A87 240-0

Sampled: 01/18/12 16:00

Prepared: 01/23/12 11:04

Analyzed: 02/01/12 17:52

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201461

Sequence: 2B02024

Calibration: 2B01011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.6	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.160	79	40 - 135	
Tetrachloro-m-xylene	0.202	0.123	61	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET

USEPA-6010C

BPS1-TT-Dup02-01182012

BPS1-TT-MW30412

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-10

Sampled: 01/18/12 16:00

Prepared: 01/31/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201437

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	10	ug/L	8.1	10	20	J	02/01/12 10:48

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-Dup02-01182012

BPS1-TT-MW304E2

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-10

Sampled: 01/18/12 16:00

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201436

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	5	170	ug/L	0.98	2.5	5.0		01/31/12 16:44

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-Dup02-01182012

BPS1-TT-MW304I2

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-10

Sampled: 01/18/12 16:00

Prepared: 01/19/12 10:34

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201626

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	182	ug/L	0.3	1.0	1.0		01/19/12 11:46

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-05

File ID: 1201254-05.D

Sampled: 01/19/12 11:17

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 16:05

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-05

File ID: 1201254-05.D

Sampled: 01/19/12 11:17

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 16:05

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	40.7	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	495461	5.13	83	5.13	
Chlorobenzene-d5	466712	8.08	84	8.08	
1,4-Dichlorobenzene-d4	249857	10.38	78	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-05

File ID: A87 041-0

Sampled: 01/19/12 11:17

Prepared: 01/23/12 11:22

Analyzed: 01/26/12 01:43

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 1000 mL / 2 mL

QC Batch: 1201518

Sequence: 2B06048

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.200	0.198	99	40 - 135	
Tetrachloro-m-xylene	0.200	0.163	82	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201254-05RE1

File ID: A87 376-0

Sampled: 01/19/12 11:17

Prepared: 01/23/12 11:22

Analyzed: 02/07/12 03:56

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 1000 mL / 2 mL

QC Batch: 1201518

Sequence: 2B09039

Calibration: 2B09014

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	4	4.2	0.22	0.32	0.80	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.200	0.194	97	40 - 135	
Tetrachloro-m-xylene	0.200	0.156	78	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-05

Sampled: 01/19/12 11:17

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	160	ug/L	8.1	10	20		01/30/12 14:41

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW304D-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201254-05

Sampled: 01/19/12 11:17

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.5	ug/L	0.20	0.50	1.0		01/31/12 16:11

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-06

File ID: 1201218-06.D

Sampled: 01/17/12 10:50

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 13:18

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-06

File ID: 1201218-06.D

Sampled: 01/17/12 10:50

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 13:18

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.8	102	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	569876	5.13	95	5.13	
Chlorobenzene-d5	542177	8.08	94	8.08	
1,4-Dichlorobenzene-d4	296764	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-06

File ID: A87 015-0

Sampled: 01/17/12 10:50

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 15:13

Solids:

Preparation: 3510C Liquid-Liquid Exl

Initial/Final: 990 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.181	90	40 - 135	
Tetrachloro-m-xylene	0.202	0.162	80	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-06

Sampled: 01/17/12 10:50

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	560	ug/L	8.1	10	20		01/30/12 12:26

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW305S-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-06

Sampled: 01/17/12 10:50

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.4	ug/L	0.20	0.50	1.0		01/31/12 15:28

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-Dup01-01172012

BPS1-TT-MW3055

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-12

File ID: 1201218-12.D

Sampled: 01/17/12 12:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 19:18

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-Dup01-01172012

BPS1-TT-MW3058

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-12

File ID: 1201218-12.D

Sampled: 01/17/12 12:00

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 19:18

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.2	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	39.2	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	541628	5.13	90	5.13	
Chlorobenzene-d5	515065	8.08	90	8.08	
1,4-Dichlorobenzene-d4	285259	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-Dup01-01172012

BPS1-TT-MW3055

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-12

File ID: A87 023-0

Sampled: 01/17/12 12:00

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 18:27

Solids:

Preparation: 3510C Liquid-Liquid Exl

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.184	90	40 - 135	
Tetrachloro-m-xylene	0.204	0.162	79	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET

USEPA-6010C

BPS1-Dup01-01172012

BPS1-TT-MW305S

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-12

Sampled: 01/17/12 12:00

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	650	ug/L	8.1	10	20		01/30/12 12:50

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-Dup01-01172012

BPS1- TT-MW305 S

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-12

Sampled: 01/17/12 12:00

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.6	ug/L	0.20	0.50	1.0		01/31/12 15:38

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-08

File ID: 1201218-08.D

Sampled: 01/17/12 11:58

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 14:13

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.49	0.14	0.50	1.0	J
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.27	0.16	0.50	1.0	J
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	2.7	0.19	0.50	1.0	
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	1.3	0.17	0.50	1.0	
156-59-2	cis-1,2-Dichloroethene	1	4.7	0.17	0.50	1.0	
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-08

File ID: 1201218-08.D

Sampled: 01/17/12 11:58

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 14:13

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	3.3	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.28	0.14	0.50	1.0	J
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	3100	0.18	0.50	1.0	E
75-69-4	Trichlorofluoromethane	1	0.91	0.18	0.50	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	1.1	0.22	0.50	1.0	
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.9	102	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	573063	5.13	95	5.13	
Chlorobenzene-d5	539488	8.08	94	8.08	
1,4-Dichlorobenzene-d4	298649	10.38	88	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-08RE1

File ID: 1201218-08D.D

Sampled: 01/17/12 11:58

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 18:23

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	50	50	33	50	500	U
71-43-2	Benzene	50	25	5.8	25	50	U
74-97-5	Bromochloromethane	50	25	7.8	25	50	U
75-27-4	Bromodichloromethane	50	25	6.7	25	50	U
75-25-2	Bromoform	50	12	5.1	12	50	U
74-83-9	Bromomethane	50	25	14	25	50	U
75-15-0	Carbon Disulfide	50	25	9.4	25	250	U
56-23-5	Carbon Tetrachloride	50	25	7.2	25	50	U
108-90-7	Chlorobenzene	50	25	6.4	25	50	U
75-00-3	Chloroethane	50	25	7.5	25	50	U
67-66-3	Chloroform	50	25	8.0	25	50	U
74-87-3	Chloromethane	50	25	9.0	25	50	U
110-82-7	Cyclohexane	50	25	14	25	250	U
96-12-8	1,2-Dibromo-3-chloropropane	50	25	13	25	100	U
124-48-1	Dibromochloromethane	50	12	4.7	12	50	U
106-93-4	1,2-Dibromoethane	50	12	5.4	12	50	U
95-50-1	1,2-Dichlorobenzene	50	25	7.7	25	50	U
541-73-1	1,3-Dichlorobenzene	50	12	5.3	12	50	U
106-46-7	1,4-Dichlorobenzene	50	25	7.8	25	50	U
75-71-8	Dichlorodifluoromethane	50	25	12	25	50	U
75-34-3	1,1-Dichloroethane	50	25	9.7	25	50	U
107-06-2	1,2-Dichloroethane	50	25	6.1	25	50	U
75-35-4	1,1-Dichloroethene	50	25	8.6	25	50	U
156-59-2	cis-1,2-Dichloroethene	50	25	8.6	25	50	U
156-60-5	trans-1,2-Dichloroethene	50	25	5.7	25	50	U
78-87-5	1,2-Dichloropropane	50	25	7.3	25	50	U
10061-01-5	cis-1,3-Dichloropropene	50	5.0	2.5	5.0	50	U
10061-02-6	trans-1,3-Dichloropropene	50	12	5.4	12	50	U
123-91-1	1,4-Dioxane	50	1200	500	1200	2500	U
100-41-4	Ethylbenzene	50	12	5.4	12	50	U
591-78-6	2-Hexanone	50	25	12	25	250	U
98-82-8	Isopropylbenzene	50	25	8.4	25	50	U
79-20-9	Methyl Acetate	50	25	14	25	250	U
1634-04-4	Methyl tert-Butyl Ether	50	25	6.4	25	50	U
108-87-2	Methylcyclohexane	50	25	12	25	250	U
75-09-2	Methylene Chloride	50	25	17	25	50	U
78-93-3	2-Butanone (MEK)	50	25	14	25	250	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-08RE1

File ID: 1201218-08D.D

Sampled: 01/17/12 11:58

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 18:23

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	50	25	12	25	250	U
100-42-5	Styrene	50	5.0	2.8	5.0	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	25	6.0	25	50	U
127-18-4	Tetrachloroethene	50	25	8.2	25	50	U
108-88-3	Toluene	50	5.0	2.8	5.0	50	U
87-61-6	1,2,3-Trichlorobenzene	50	25	6.9	25	100	U
120-82-1	1,2,4-Trichlorobenzene	50	25	7.4	25	100	U
71-55-6	1,1,1-Trichloroethane	50	25	7.2	25	50	U
79-00-5	1,1,2-Trichloroethane	50	25	7.6	25	50	U
79-01-6	Trichloroethene	50	3900	9.2	25	50	
75-69-4	Trichlorofluoromethane	50	25	9.0	25	50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50	25	11	25	50	U
75-01-4	Vinyl Chloride	50	25	12	25	50	U
179601-23-1	Xylene, Meta + Para	50	25	14	25	100	U
95-47-6	Xylene, Ortho	50	12	5.2	12	50	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.5	101	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	37.6	94	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	523098	5.13	88	5.13	
Chlorobenzene-d5	496296	8.08	90	8.08	
1,4-Dichlorobenzene-d4	264842	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-08

File ID: A87 017-0

Sampled: 01/17/12 11:58

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 16:01

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.192	94	40 - 135	
Tetrachloro-m-xylene	0.204	0.169	83	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW3051-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-08RE1

File ID: A87_174-0

Sampled: 01/17/12 11:58

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 15:29

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2B01038

Calibration: 2B01011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.3	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.193	95	40 - 135	
Tetrachloro-m-xylene	0.204	0.165	81	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-08

Sampled: 01/17/12 11:58

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	1100	ug/L	8.1	10	20		01/30/12 12:34

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW305I-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-08

Sampled: 01/17/12 11:58

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	3.5	ug/L	0.20	0.50	1.0		01/31/12 15:33

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-10

File ID: 1201218-10.D

Sampled: 01/17/12 14:46

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 15:09

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.19	0.16	0.50	1.0	J
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.57	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.73	0.17	0.50	1.0	J
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-10

File ID: 1201218-10.D

Sampled: 01/17/12 14:46

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 15:09

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.9	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	140	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.94	0.18	0.50	1.0	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.33	0.22	0.50	1.0	J
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.1	103	85 - 115	
1,2-Dichloroethane-d4	40.0	40.8	102	70 - 120	
Toluene-d8	40.0	41.3	103	85 - 120	
4-Bromofluorobenzene	40.0	39.4	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	555682	5.13	92	5.13	
Chlorobenzene-d5	527690	8.08	92	8.08	
1,4-Dichlorobenzene-d4	295729	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-10

File ID: A87 021-0

Sampled: 01/17/12 14:46

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 17:38

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 960 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.193	93	40 - 135	
Tetrachloro-m-xylene	0.208	0.166	80	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-10RE1

File ID: A87 178-0

Sampled: 01/17/12 14:46

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 17:06

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 960 mL / 2 mL

QC Batch: 1201461

Sequence: 2B01016

Calibration: 2B01003

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.16	0.062	0.080	0.20	J

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.208	0.207	99	40 - 135	
Tetrachloro-m-xylene	0.208	0.173	83	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-10

Sampled: 01/17/12 14:46

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	1100	ug/L	8.1	10	20		01/30/12 12:42

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-10

Sampled: 01/17/12 14:46

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	22	ug/L	0.20	0.50	1.0		01/31/12 15:35

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW305D-01172012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-10

Sampled: 01/17/12 14:46

Prepared: 01/18/12 10:14

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201614

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/18/12 10:41

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-07

File ID: 1201310-07.D

Sampled: 01/23/12 13:50

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 15:41

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-07

File ID: 1201310-07.D

Sampled: 01/23/12 13:50

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 15:41

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.40	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	41.1	103	85 - 120	
4-Bromofluorobenzene	40.0	38.0	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	491916	5.12	93	5.13	
Chlorobenzene-d5	470240	8.08	93	8.08	
1,4-Dichlorobenzene-d4	252002	10.38	85	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-07

File ID: A87 092-0

Sampled: 01/23/12 13:50

Prepared: 01/25/12 08:27

Analyzed: 01/27/12 01:21

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B06054

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.202	100	40 - 135	
Tetrachloro-m-xylene	0.202	0.154	76	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-07RE1

File ID: A87 292-0

Sampled: 01/23/12 13:50

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 06:30

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B07033

Calibration: 2B03001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.54	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.189	94	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-07

Sampled: 01/23/12 13:50

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	310	ug/L	8.1	10	20		01/30/12 15:59

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-07

Sampled: 01/23/12 13:50

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.3	ug/L	0.20	0.50	1.0		01/31/12 16:40

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-07

Sampled: 01/23/12 13:50

Prepared: 01/24/12 10:38

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201753

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/24/12 11:30

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

BPS1-TT-MW306S-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-07

Sampled: 01/23/12 13:50

Prepared: 01/25/12 10:42

Solids: 0.00

Preparation: General Inorganic Prep

QC Batch: 1201785

Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	710	ug/L	280	500	1000	J	01/26/12 03:03

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW3061-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-04

File ID: 1201310-04.D

Sampled: 01/23/12 12:10

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 15:13

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW3061-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-04

File ID: 1201310-04.D

Sampled: 01/23/12 12:10

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 15:13

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.54	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.4	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	492913	5.13	93	5.13	
Chlorobenzene-d5	466790	8.08	92	8.08	
1,4-Dichlorobenzene-d4	250499	10.38	85	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-04

File ID: A87 088-0

Sampled: 01/23/12 12:10

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 23:44

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.215	107	40 - 135	
Tetrachloro-m-xylene	0.202	0.203	100	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO V

Matrix: Ground Water

Laboratory ID: 1201310-04RE1

File ID: A87_291-0

Sampled: 01/23/12 12:10

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 06:05

Solids:

Preparation: 3510C Liquid-Liquid Exl

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B07033

Calibration: 2B03001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	1.8	0.11	0.16	0.40	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.203	101	40 - 135	
Tetrachloro-m-xylene	0.202	0.177	88	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-04

Sampled: 01/23/12 12:10

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	93	ug/L	8.1	10	20		01/30/12 15:34

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-04

Sampled: 01/23/12 12:10

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.3	ug/L	0.20	0.50	1.0		01/31/12 16:27

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-04

Sampled: 01/23/12 12:10

Prepared: 01/24/12 10:38

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201753

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/24/12 11:17

INORGANIC ANALYSIS DATA SHEET

SM 5310 C 20th

BPS1-TT-MW306I-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-04

Sampled: 01/23/12 12:10

Prepared: 01/25/12 10:42

Solids: 0.00

Preparation: General Inorganic Prep

QC Batch: 1201785

Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	3300	ug/L	280	500	1000		01/26/12 02:56

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-02

File ID: 1201310-02.D

Sampled: 01/23/12 10:35

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 14:18

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-02

File ID: 1201310-02.D

Sampled: 01/23/12 10:35

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 14:18

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.44	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	2.4	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.9	105	85 - 115	
1,2-Dichloroethane-d4	40.0	39.8	99	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	497242	5.13	94	5.13	
Chlorobenzene-d5	472128	8.08	93	8.08	
1,4-Dichlorobenzene-d4	254168	10.38	86	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-02

File ID: A87 086-0

Sampled: 01/23/12 10:35

Prepared: 01/25/12 08:27

Analyzed: 01/26/12 22:55

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.197	98	40 - 135	
Tetrachloro-m-xylene	0.202	0.158	78	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201310-02RE1

File ID: A87 286-0

Sampled: 01/23/12 10:35

Prepared: 01/25/12 08:27

Analyzed: 02/03/12 04:04

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201593

Sequence: 2B08001

Calibration: 2B08001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.61	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.193	96	40 - 135	
Tetrachloro-m-xylene	0.202	0.153	76	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-02

Sampled: 01/23/12 10:35

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	77	ug/L	8.1	10	20		01/30/12 15:18

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-02

Sampled: 01/23/12 10:35

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	1.2	ug/L	0.20	0.50	1.0		01/31/12 16:25

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

BPS1-TT-MW306D-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201310-02

Sampled: 01/23/12 10:35

Prepared: 01/25/12 10:42

Solids: 0.00

Preparation: General Inorganic Prep

QC Batch: 1201785

Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	1100	ug/L	280	500	1000		01/26/12 02:48

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-09

File ID: 1201244-09.D

Sampled: 01/18/12 14:50

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 12:51

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.24	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.30	0.27	0.50	5.0	J
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-09

File ID: 1201244-09.D

Sampled: 01/18/12 14:50

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 12:51

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.3	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.57	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.2	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	101	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	523242	5.13	88	5.13	
Chlorobenzene-d5	490935	8.08	89	8.08	
1,4-Dichlorobenzene-d4	265413	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO V

Matrix: Ground Water

Laboratory ID: 1201244-09

File ID: A87 033-0

Sampled: 01/18/12 14:50

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 22:29

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 1000 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

<i>PCB-1248</i>	<i>1</i>	<i>0.080</i>	<i>0.08</i>	<i>0.20</i>	<i>U</i>
System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.200	0.193	96	40 - 135	
Tetrachloro-m-xylene	0.200	0.176	88	36 - 114	

* Values outside of QC limits

3-29-12
JAS

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-09

Sampled: 01/18/12 14:50

Prepared: 01/31/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201437

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	530	ug/L	8.1	10	20		02/01/12 10:44

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW307S-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-09

Sampled: 01/18/12 14:50

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201436

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	4.0	ug/L	0.20	0.50	1.0		01/31/12 15:56

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW3071-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-07

File ID: 1201244-07.D

Sampled: 01/18/12 12:32

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 17:27

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.20	0.19	0.50	5.0	J
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.23	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-07

File ID: 1201244-07.D

Sampled: 01/18/12 12:32

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 17:27

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.1	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.9	102	85 - 115	
1,2-Dichloroethane-d4	40.0	40.5	101	70 - 120	
Toluene-d8	40.0	41.2	103	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	538692	5.13	89	5.13	
Chlorobenzene-d5	512513	8.08	89	8.08	
1,4-Dichlorobenzene-d4	281998	10.38	83	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-07

File ID: A87 029-0

Sampled: 01/18/12 12:32

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 20:52

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.185	90	40 - 135	
Tetrachloro-m-xylene	0.206	0.151	73	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-07RE1

File ID: A87 278-0

Sampled: 01/18/12 12:32

Prepared: 01/23/12 11:04

Analyzed: 02/03/12 00:50

Solids:

Preparation: 3510C Liquid-Liquid Exl

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: 2B03005

Calibration: 2B03001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.84	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.181	88	40 - 135	
Tetrachloro-m-xylene	0.206	0.145	70	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-07

Sampled: 01/18/12 12:32

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	460	ug/L	8.1	10	20		01/30/12 13:22

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW3071-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-07

Sampled: 01/18/12 12:32

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	12	ug/L	0.20	0.50	1.0		01/31/12 15:50

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW307I-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECHNUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-07

Sampled: 01/18/12 12:32

Prepared: 01/19/12 10:34

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201625

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/19/12 11:21

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-04

File ID: 1201244-04.D

Sampled: 01/18/12 10:42

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:56

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-04

File ID: 1201244-04.D

Sampled: 01/18/12 10:42

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:56

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.0	105	85 - 115	
1,2-Dichloroethane-d4	40.0	41.0	102	70 - 120	
Toluene-d8	40.0	40.7	102	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	517989	5.13	87	5.13	
Chlorobenzene-d5	489258	8.08	88	8.08	
1,4-Dichlorobenzene-d4	264473	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201244-04

File ID: A87_026-0

Sampled: 01/18/12 10:42

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 19:39

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.200	97	40 - 135	
Tetrachloro-m-xylene	0.206	0.162	78	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECHNUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO V

Matrix: Ground Water

Laboratory ID: 1201244-04RE1

File ID: A87 181-0

Sampled: 01/18/12 10:42

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 18:19

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: 2B01016

Calibration: 2B01003

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.56	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.210	102	40 - 135	
Tetrachloro-m-xylene	0.206	0.199	97	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-04

Sampled: 01/18/12 10:42

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	460	ug/L	8.1	10	20		01/30/12 13:10

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW307D-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201244-04

Sampled: 01/18/12 10:42

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	13	ug/L	0.20	0.50	1.0		01/31/12 15:41

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-04

File ID: 1201218-04.D

Sampled: 01/16/12 16:05

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 12:23

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-04

File ID: 1201218-04.D

Sampled: 01/16/12 16:05

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 12:23

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.71	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.5	101	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	40.9	102	85 - 120	
4-Bromofluorobenzene	40.0	39.0	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	560980	5.13	93	5.13	
Chlorobenzene-d5	528535	8.08	92	8.08	
1,4-Dichlorobenzene-d4	290125	10.38	85	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-04

File ID: A87 013-0

Sampled: 01/16/12 16:05

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 14:24

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.190	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.165	81	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-04RE1

File ID: A87 169-0

Sampled: 01/16/12 16:05

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 13:28

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2B01038

Calibration: 2B01011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.20	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.199	97	40 - 135	
Tetrachloro-m-xylene	0.204	0.177	87	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-04

Sampled: 01/16/12 16:05

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	150	ug/L	8.1	10	20		01/30/12 11:53

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW308S-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-04

Sampled: 01/16/12 16:05

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	10	ug/L	0.20	0.50	1.0		01/31/12 15:22

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-03

File ID: 1201218-03.D

Sampled: 01/16/12 14:40

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 11:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW3081-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-03

File ID: 1201218-03.D

Sampled: 01/16/12 14:40

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 11:55

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.2	101	85 - 115	
1,2-Dichloroethane-d4	40.0	39.3	98	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	39.4	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	580762	5.13	96	5.13	
Chlorobenzene-d5	546951	8.08	95	8.08	
1,4-Dichlorobenzene-d4	302793	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-03

File ID: A87 012-0

Sampled: 01/16/12 14:40

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 14:00

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.193	93	40 - 135	
Tetrachloro-m-xylene	0.206	0.171	83	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-03RE1

File ID: A87 168-0

Sampled: 01/16/12 14:40

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 13:03

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: 2B01016

Calibration: 2B01003

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.52	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.209	101	40 - 135	
Tetrachloro-m-xylene	0.206	0.183	89	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-03

Sampled: 01/16/12 14:40

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	240	ug/L	8.1	10	20		01/30/12 11:49

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW308I-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-03

Sampled: 01/16/12 14:40

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	10	ug/L	0.20	0.50	1.0		01/31/12 15:21

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-02

File ID: 1201218-02.D

Sampled: 01/16/12 12:30

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 11:27

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.19	0.16	0.50	1.0	J
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-02

File ID: 1201218-02.D

Sampled: 01/16/12 12:30

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 11:27

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.70	0.16	0.50	1.0	J
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.6	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.7	102	85 - 115	
1,2-Dichloroethane-d4	40.0	39.8	99	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	39.3	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	572613	5.13	95	5.13	
Chlorobenzene-d5	539709	8.08	94	8.08	
1,4-Dichlorobenzene-d4	298556	10.38	88	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201218-02

File ID: A87 011-0

Sampled: 01/16/12 12:30

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 13:36

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.183	89	40 - 135	
Tetrachloro-m-xylene	0.206	0.168	82	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO V

Matrix: Ground Water

Laboratory ID: 1201218-02RE1

File ID: A87 167-0

Sampled: 01/16/12 12:30

Prepared: 01/23/12 11:04

Analyzed: 01/28/12 12:39

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201461

Sequence: 2B01016

Calibration: 2B01003

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.073	0.062	0.080	0.20	J

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.207	100	40 - 135	
Tetrachloro-m-xylene	0.206	0.175	85	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-02

Sampled: 01/16/12 12:30

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	240	ug/L	8.1	10	20		01/30/12 11:45

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW308D-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201218-02

Sampled: 01/16/12 12:30

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	17	ug/L	0.20	0.50	1.0		01/31/12 15:19

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201112-02

File ID: 1201112-02.D

Sampled: 01/10/12 15:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 17:25

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201112-02

File ID: 1201112-02.D

Sampled: 01/10/12 15:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 17:25

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.61	0.18	0.50	1.0	J
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.6	99	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	39.9	100	85 - 120	
4-Bromofluorobenzene	40.0	38.9	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	621343	5.13	93	5.13	
Chlorobenzene-d5	560678	8.08	93	8.08	
1,4-Dichlorobenzene-d4	302809	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO V

Matrix: Ground Water

Laboratory ID: 1201112-02

File ID: A86 336-0

Sampled: 01/10/12 15:00

Prepared: 01/12/12 08:43

Analyzed: 01/16/12 16:32

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 930 mL / 2 mL

QC Batch: 1201141

Sequence: 2A20016

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.086	0.058	0.086	0.22	U
11104-28-2	PCB-1221	1	0.086	0.049	0.086	0.22	U
11141-16-5	PCB-1232	1	0.086	0.044	0.086	0.22	U
53469-21-9	PCB-1242	1	0.086	0.067	0.086	0.22	U
11097-69-1	PCB-1254	1	0.086	0.057	0.086	0.22	U
11096-82-5	PCB-1260	1	0.086	0.031	0.086	0.22	U
37324-23-5	PCB-1262	1	0.086	0.086	0.086	0.22	U
11100-14-4	PCB-1268	1	0.086	0.043	0.086	0.22	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.215	0.197	91	40 - 135	
Tetrachloro-m-xylene	0.215	0.186	86	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO V

Matrix: Ground Water

Laboratory ID: 1201112-02RE1

File ID: A86 392-0

Sampled: 01/10/12 15:00

Prepared: 01/12/12 08:43

Analyzed: 01/17/12 15:19

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 930 mL / 2 mL

QC Batch: 1201141

Sequence: 2A20029

Calibration: 2A20009

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	1.0	0.058	0.086	0.22	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.215	0.204	95	40 - 135	
Tetrachloro-m-xylene	0.215	0.182	84	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201112-02

Sampled: 01/10/12 15:00

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	2100	ug/L	8.1	10	20		01/30/12 11:33

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW309S-01102012-F

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201112-03

Sampled: 01/10/12 15:00

Prepared: 01/24/12 07:00

Solids: 0.00

Preparation: General Metals Prep

QC Batch: 1201439

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	92	ug/L	8.1	10	20		01/26/12 14:17

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPSI-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201112-02

Sampled: 01/10/12 15:00

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	18	ug/L	0.20	0.50	1.0		01/31/12 15:14

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW309S-01102012-F

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201112-03

Sampled: 01/10/12 15:00

Prepared: 01/24/12 07:00

Solids: 0.00

Preparation: General Metals Prep

QC Batch: 1201438

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	13	ug/L	0.20	0.50	1.0		01/31/12 14:56

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW3091-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTQ WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-02

File ID: 1201126-02.D

Sampled: 01/11/12 10:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 17:52

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW3091-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-02

File ID: 1201126-02.D

Sampled: 01/11/12 10:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 17:52

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.6	99	85 - 115	
1,2-Dichloroethane-d4	40.0	39.5	99	70 - 120	
Toluene-d8	40.0	39.6	99	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	628762	5.13	94	5.13	
Chlorobenzene-d5	563778	8.08	94	8.08	
1,4-Dichlorobenzene-d4	304000	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201126-02

File ID: A86 341-0

Sampled: 01/11/12 10:00

Prepared: 01/13/12 08:41

Analyzed: 01/16/12 18:33

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201186

Sequence: 2A20016

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.187	92	40 - 135	
Tetrachloro-m-xylene	0.202	0.141	70	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO V

Matrix: Ground Water

Laboratory ID: 1201126-02RE1

File ID: A86 386-0

Sampled: 01/11/12 10:00

Prepared: 01/13/12 08:41

Analyzed: 01/17/12 12:53

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1201186

Sequence: 2A20018

Calibration: 2A20002

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
53469-21-9	PCB-1242	1	0.43	0.062	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.187	93	40 - 135	
Tetrachloro-m-xylene	0.202	0.143	71	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-02

Sampled: 01/11/12 10:00

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	130	ug/L	8.1	10	20		01/30/12 11:37

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW309S-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201112-02

Sampled: 01/10/12 15:00

Prepared: 01/11/12 08:14

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201170

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	8.9	ug/L	0.3	1.0	1.0		01/11/12 10:10

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-02

Sampled: 01/11/12 10:00

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	49	ug/L	0.20	0.50	1.0		01/31/12 15:15

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW309I-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-02

Sampled: 01/11/12 10:00

Prepared: 01/12/12 08:23

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201249

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	2	47.7	ug/L	0.6	2.0	2.0		01/12/12 09:58

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-03

File ID: 1201126-03.D

Sampled: 01/11/12 14:10

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 18:20

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.27	0.19	0.50	1.0	J
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-03

File ID: 1201126-03.D

Sampled: 01/11/12 14:10

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 18:20

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	1.1	0.16	0.50	1.0	
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	1.8	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.45	0.22	0.50	1.0	J
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.6	99	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	40.1	100	85 - 120	
4-Bromofluorobenzene	40.0	38.8	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	617610	5.12	92	5.13	
Chlorobenzene-d5	562579	8.08	93	8.08	
1,4-Dichlorobenzene-d4	303302	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Ground Water

Laboratory ID: 1201126-03

File ID: A86 342-0

Sampled: 01/11/12 14:10

Prepared: 01/13/12 08:41

Analyzed: 01/16/12 18:58

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 940 mL / 2 mL

QC Batch: 1201186

Sequence: 2A20016

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.085	0.057	0.085	0.21	U
11104-28-2	PCB-1221	1	0.085	0.048	0.085	0.21	U
11141-16-5	PCB-1232	1	0.085	0.044	0.085	0.21	U
53469-21-9	PCB-1242	1	0.085	0.066	0.085	0.21	U
12672-29-6	PCB-1248	1	0.085	0.058	0.085	0.21	U
11097-69-1	PCB-1254	1	0.085	0.057	0.085	0.21	U
11096-82-5	PCB-1260	1	0.085	0.031	0.085	0.21	U
37324-23-5	PCB-1262	1	0.085	0.085	0.085	0.21	U
11100-14-4	PCB-1268	1	0.085	0.042	0.085	0.21	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.213	0.197	93	40 - 135	
Tetrachloro-m-xylene	0.213	0.164	77	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-03

Sampled: 01/11/12 14:10

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	2400	ug/L	8.1	10	20		01/30/12 11:41

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-TT-MW309D-01112012-F

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-04

Sampled: 01/11/12 14:10

Prepared: 01/24/12 07:00

Solids: 0.00

Preparation: General Metals Prep

QC Batch: 1201439

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	31	ug/L	8.1	10	20		01/26/12 14:27

INORGANIC ANALYSIS DATA SHEET

USEPA-6020A

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-03

Sampled: 01/11/12 14:10

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	7.5	ug/L	0.20	0.50	1.0		01/31/12 15:16

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-TT-MW309D-01112012-F

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-04

Sampled: 01/11/12 14:10

Prepared: 01/24/12 07:00

Solids: 0.00

Preparation: General Metals Prep

QC Batch: 1201438

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	0.56	ug/L	0.20	0.50	1.0	J	01/31/12 14:57

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-TT-MW309D-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Ground Water

Laboratory ID: 1201126-03

Sampled: 01/11/12 14:10

Prepared: 01/12/12 08:23

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201249

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/12/12 10:00

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-01

File ID: 1110398-01.D

Sampled: 10/19/11 11:00

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 16:05

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1112065

Sequence: 1J31056

Calibration: 1J28012

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECHNUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-01

File ID: 1110398-01.D

Sampled: 10/19/11 11:00

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 16:05

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1112065

Sequence: 1131056

Calibration: 1128012

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.1	105	85 - 115	
1,2-Dichloroethane-d4	40.0	38.7	97	70 - 120	
Toluene-d8	40.0	39.3	98	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
Fluorobenzene	650570	5.13	746237	5.13	
Chlorobenzene-d5	502992	8.08	548111	8.08	
1,4-Dichlorobenzene-d4	258254	10.38	303977	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WJ

Matrix: Surface Water

Laboratory ID: 1110398-01

File ID: A83 044-0

Sampled: 10/19/11 11:00

Prepared: 10/25/11 08:26

Analyzed: 10/27/11 08:56

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1111570

Sequence: 1J31031

Calibration: 1J31007

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.173	86	40 - 135	
Tetrachloro-m-xylene	0.202	0.149	74	36 - 114	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECHNUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WJ

Matrix: Surface Water

Laboratory ID: 1110398-01RE1

File ID: A83 158-0

Sampled: 10/19/11 11:00

Prepared: 10/25/11 08:26

Analyzed: 10/31/11 19:37

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 990 mL / 2 mL

QC Batch: 1111570

Sequence: 1K02044

Calibration: 1K02011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	1	0.35	0.054	0.080	0.20	

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.202	0.181	89	40 - 135	
Tetrachloro-m-xylene	0.202	0.158	78	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-01

Sampled: 10/19/11 11:00

Prepared: 11/02/11 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1112149

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	240	ug/L	8.1	10	20		11/04/11 08:44

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-01

Sampled: 10/19/11 11:00

Prepared: 11/02/11 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1112150

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	2.4	ug/L	0.20	0.50	1.0		11/04/11 08:30

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPSI-SW3001

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-01

Sampled: 10/19/11 11:00

Prepared: 10/20/11 10:29

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1112234

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	0.4	ug/L	0.3	1.0	1.0	J	10/20/11 10:37

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-02

File ID: 1110398-02.D

Sampled: 10/19/11 11:30

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 16:33

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1112065

Sequence: 1131056

Calibration: 1128012

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-02

File ID: 1110398-02.D

Sampled: 10/19/11 11:30

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 16:33

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1112065

Sequence: 1J31056

Calibration: 1J28012

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	105	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	39.4	99	85 - 120	
4-Bromofluorobenzene	40.0	38.2	96	75 - 120	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
Fluorobenzene	662424	5.13	746237	5.13	
Chlorobenzene-d5	506412	8.08	548111	8.08	
1,4-Dichlorobenzene-d4	269627	10.38	303977	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECHNUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO W1

Matrix: Surface Water

Laboratory ID: 1110398-02

File ID: A83 045-0

Sampled: 10/19/11 11:30

Prepared: 10/25/11 08:26

Analyzed: 10/27/11 09:20

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 800 mL / 2 mL

QC Batch: 1111570

Sequence: 1J31031

Calibration: 1J31007

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.10	0.067	0.10	0.25	U
11104-28-2	PCB-1221	1	0.10	0.057	0.10	0.25	U
11141-16-5	PCB-1232	1	0.10	0.051	0.10	0.25	U
53469-21-9	PCB-1242	1	0.10	0.077	0.10	0.25	U
12672-29-6	PCB-1248	1	0.10	0.068	0.10	0.25	U
11097-69-1	PCB-1254	1	0.10	0.066	0.10	0.25	U
11096-82-5	PCB-1260	1	0.10	0.036	0.10	0.25	U
37324-23-5	PCB-1262	1	0.10	0.10	0.10	0.25	U
11100-14-4	PCB-1268	1	0.10	0.050	0.10	0.25	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.250	0.216	86	40 - 135	
Tetrachloro-m-xylene	0.250	0.186	75	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-02

Sampled: 10/19/11 11:30

Prepared: 11/02/11 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1112149

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	150	ug/L	8.1	10	20		11/04/11 08:48

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-02

Sampled: 10/19/11 11:30

Prepared: 11/02/11 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1112150

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.84	ug/L	0.20	0.50	1.0	J	11/04/11 08:38

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPSI-SW3002

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Surface Water

Laboratory ID: 1110398-02

Sampled: 10/19/11 11:30

Prepared: 10/20/11 10:29

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1112234

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	0.4	ug/L	0.3	1.0	1.0	J	10/20/11 10:39

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPSI-TT-MW309-0005

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO W1

Matrix: Soil

Laboratory ID: 1110398-06

File ID: A83 032-0

Sampled: 10/19/11 13:15

Prepared: 10/26/11 08:22

Analyzed: 10/27/11 04:05

Solids: 95.74

Preparation: 3550C Sonication Extrac

Initial/Final: 30.2 g / 10 mL

QC Batch: 1111759

Sequence: 1J31022

Calibration: 1J31005

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0070	0.0036	0.0070	0.34	U
11096-82-5	PCB-1260	1	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.34	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0346	0.0298	86	60 - 125	
Tetrachloro-m-xylene	0.0346	0.0304	88	32 - 129	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPSI-TT-MW309-0005

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WJ

Matrix: Soil

Laboratory ID: 1110398-06RE1

File ID: A83 163-0

Sampled: 10/19/11 13:15

Prepared: 10/26/11 08:22

Analyzed: 10/31/11 21:38

Solids: 95.74

Preparation: 3550C Sonication Extrac

Initial/Final: 30.2 g / 10 mL

QC Batch: 1111759

Sequence: 1K02044

Calibration: 1K02011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	10	1.3	0.029	0.070	0.34	

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0346	0.0325	94	60 - 125	
Tetrachloro-m-xylene	0.0346	0.0280	81	32 - 129	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-3550B

BPSI-TT-MW309-0005

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Soil

Laboratory ID: 1110398-06

Sampled: 10/19/11 13:15

Prepared: 10/25/11 12:06

Solids: 95.74

Preparation: General Inorganic Prep

QC Batch: 1111711

Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	96	%	0.1	0.1	0.1		10/25/11 12:30

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPSI-TT-MW309-0510

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO W1

Matrix: Soil

Laboratory ID: 1110398-07

File ID: A83 033-0

Sampled: 10/19/11 13:30

Prepared: 10/26/11 08:22

Analyzed: 10/27/11 04:29

Solids: 95.86

Preparation: 3550C Sonication Extrac

Initial/Final: 29.4 g / 10 mL

QC Batch: 1111759

Sequence: 1J31022

Calibration: 1J31005

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0070	0.0035	0.0070	0.34	U
11096-82-5	PCB-1260	1	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.34	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0355	0.0299	84	60 - 125	
Tetrachloro-m-xylene	0.0355	0.0319	90	32 - 129	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPSI-TT-MW309-0510

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO W1

Matrix: Soil

Laboratory ID: 1110398-07RE1

File ID: A83_164-0

Sampled: 10/19/11 13:30

Prepared: 10/26/11 08:22

Analyzed: 10/31/11 22:03

Solids: 95.86

Preparation: 3550C Sonication Extrac

Initial/Final: 29.4 g / 10 mL

QC Batch: 1111759

Sequence: 1K02044

Calibration: 1K02011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	5	0.72	0.015	0.035	0.34	

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0355	0.0362	102	60 - 125	
Tetrachloro-m-xylene	0.0355	0.0314	88	32 - 129	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-3550B

BPSI-TT-MW309-0510

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Soil

Laboratory ID: 1110398-07

Sampled: 10/19/11 13:30

Prepared: 10/25/11 12:06

Solids: 95.86

Preparation: General Inorganic Prep

QC Batch: 1111711

Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	96	%	0.1	0.1	0.1		10/25/11 12:30

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPSI-TT-MW309-1015

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO W

Matrix: Soil

Laboratory ID: 1110398-05

File ID: A83 031-0

Sampled: 10/19/11 14:15

Prepared: 10/26/11 08:22

Analyzed: 10/27/11 03:40

Solids: 95.38

Preparation: 3550C Sonication Extrac

Initial/Final: 29.8 g / 10 mL

QC Batch: 1111759

Sequence: 1J31022

Calibration: 1J31005

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.018	0.013	0.018	0.35	U
11104-28-2	PCB-1221	1	0.018	0.012	0.018	0.35	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.35	U
53469-21-9	PCB-1242	1	0.018	0.011	0.018	0.35	U
11097-69-1	PCB-1254	1	0.0070	0.0036	0.0070	0.35	U
11096-82-5	PCB-1260	1	0.018	0.0051	0.018	0.35	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.35	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.35	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0352	0.0309	88	60 - 125	
Tetrachloro-m-xylene	0.0352	0.0375	106	32 - 129	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-1015

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO W1

Matrix: Soil

Laboratory ID: 1110398-05RE1

File ID: A83 162-0

Sampled: 10/19/11 14:15

Prepared: 10/26/11 08:22

Analyzed: 10/31/11 21:14

Solids: 95.38

Preparation: 3550C Sonication Extrac

Initial/Final: 29.8 g / 10 mL

QC Batch: 1111759

Sequence: 1K02044

Calibration: 1K02011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	50	7.0	0.15	0.35	0.68	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-3550B

BPSI-TT-MW309-1015

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Soil

Laboratory ID: 1110398-05

Sampled: 10/19/11 14:15

Prepared: 10/25/11 12:06

Solids: 95.38

Preparation: General Inorganic Prep

QC Batch: 1111711

Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	95	%	0.1	0.1	0.1		10/25/11 12:30

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPSI-TT-MW309-1520

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WJ

Matrix: Soil

Laboratory ID: 1110398-03

File ID: A83 029-0

Sampled: 10/19/11 14:00

Prepared: 10/26/11 08:22

Analyzed: 10/27/11 02:52

Solids: 96.24

Preparation: 3550C Sonication Extrac

Initial/Final: 29.3 g / 10 mL

QC Batch: 1111759

Sequence: IJ31022

Calibration: IJ31005

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0070	0.0028	0.0070	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0070	0.0035	0.0070	0.34	U
11096-82-5	PCB-1260	1	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0070	0.0019	0.0070	0.34	U
11100-14-4	PCB-1268	1	0.0070	0.0030	0.0070	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0355	0.0324	91	60 - 125	
Tetrachloro-m-xylene	0.0355	0.0317	89	32 - 129	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082

BPSI-TT-MW309-1520

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WJ

Matrix: Soil

Laboratory ID: 1110398-03RE1

File ID: A83 160-0

Sampled: 10/19/11 14:00

Prepared: 10/26/11 08:22

Analyzed: 10/31/11 20:26

Solids: 96.24

Preparation: 3550C Sonication Extrac

Initial/Final: 29.3 g / 10 mL

QC Batch: 1111759

Sequence: 1K02044

Calibration: 1K02011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	20	2.9	0.058	0.14	0.34	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-3550B

BPSI-TT-MW309-1520

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Soil

Laboratory ID: 1110398-03

Sampled: 10/19/11 14:00

Prepared: 10/25/11 12:06

Solids: 96.24

Preparation: General Inorganic Prep

QC Batch: 1111711

Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	96	%	0.1	0.1	0.1		10/25/11 12:30

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPSI-TT-MW309-2025

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WJ

Matrix: Soil

Laboratory ID: 1110398-04

File ID: A83_030-0

Sampled: 10/19/11 13:45

Prepared: 10/26/11 08:22

Analyzed: 10/27/11 03:16

Solids: 96.86

Preparation: 3550C Sonication Extrac

Initial/Final: 29.4 g / 10 mL

QC Batch: 1111759

Sequence: 1J31022

Calibration: 1J31005

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.017	0.013	0.017	0.34	U
11104-28-2	PCB-1221	1	0.017	0.012	0.017	0.34	U
11141-16-5	PCB-1232	1	0.0069	0.0028	0.0069	0.34	U
53469-21-9	PCB-1242	1	0.017	0.011	0.017	0.34	U
11097-69-1	PCB-1254	1	0.0069	0.0035	0.0069	0.34	U
11096-82-5	PCB-1260	1	0.017	0.0051	0.017	0.34	U
37324-23-5	PCB-1262	1	0.0069	0.0019	0.0069	0.34	U
11100-14-4	PCB-1268	1	0.0069	0.0030	0.0069	0.34	U

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0351	0.0327	93	60 - 125	
Tetrachloro-m-xylene	0.0351	0.0326	93	32 - 129	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPSI-TT-MW309-2025

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO W1

Matrix: Soil

Laboratory ID: 1110398-04RE1

File ID: A83 161-0

Sampled: 10/19/11 13:45

Prepared: 10/26/11 08:22

Analyzed: 10/31/11 20:50

Solids: 96.86

Preparation: 3550C Sonication Extrac

Initial/Final: 29.4 g / 10 mL

QC Batch: 1111759

Sequence: 1K02044

Calibration: 1K02011

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (mg/kg dry)	DL	LOD	LOQ	Q
12672-29-6	PCB-1248	2	0.46	0.0058	0.014	0.34	

System Monitoring Compound	ADDED (mg/kg dry)	CONC (mg/kg dry)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.0351	0.0355	101	60 - 125	
Tetrachloro-m-xylene	0.0351	0.0350	100	32 - 129	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-3550B

BPSI-TT-MW309-2025

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Soil

Laboratory ID: 1110398-04

Sampled: 10/19/11 13:45

Prepared: 10/25/11 12:06

Solids: 96.86

Preparation: General Inorganic Prep

QC Batch: 1111711

Initial/Final: 10 g / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
	Percent Solids	1	97	%	0.1	0.1	0.1		10/25/11 12:30

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-02

File ID: 1201244-02.D

Sampled: 01/18/12 08:10

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:01

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.56	0.27	0.50	5.0	J
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-02

File ID: 1201244-02.D

Sampled: 01/18/12 08:10

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:01

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	7.0	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.5	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.4	101	85 - 120	
4-Bromofluorobenzene	40.0	38.2	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	505584	5.13	85	5.13	
Chlorobenzene-d5	473250	8.08	86	8.08	
1,4-Dichlorobenzene-d4	252238	10.38	78	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water

Laboratory ID: 1201244-02

File ID: A87 024-0

Sampled: 01/18/12 08:10

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 18:51

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.197	97	40 - 135	
Tetrachloro-m-xylene	0.204	0.161	79	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-02

Sampled: 01/18/12 08:10

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	8.2	ug/L	8.1	10	20	J	01/30/12 13:02

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-02

Sampled: 01/18/12 08:10

Prepared: 01/24/12 07:00

Solids: 0.00

Preparation: General Metals Prep

QC Batch: 1201439

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	10	ug/L	8.1	10	20	U	01/26/12 14:30

INORGANIC ANALYSIS DATA SHEET**USEPA-6020A****BPS1-FB01-01182012**Laboratory: TriMatrix Laboratories, Inc.SDG: 50063-12Client: TETRA TECH NUS - PittsburghProject: NWIRP Bethpage, NY 01-CTO WE44(04)Matrix: WaterLaboratory ID: 1201244-02Sampled: 01/18/12 08:10Prepared: 01/20/12 05:30Solids: 0.00Preparation: 3020A DigestionQC Batch: 1201434Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 15:39

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-02

Sampled: 01/18/12 08:10

Prepared: 01/24/12 07:00

Solids: 0.00

Preparation: General Metals Prep

QC Batch: 1201438

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 14:58

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-FB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-02

Sampled: 01/18/12 08:10

Prepared: 01/19/12 10:34

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201625

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/19/12 11:15

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-08

File ID: 1201310-08.D

Sampled: 01/23/12 14:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:59

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	16	0.66	1.0	10	
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	4.4	0.10	0.25	1.0	
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	3.1	0.094	0.25	1.0	
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-08

File ID: 1201310-08.D

Sampled: 01/23/12 14:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:59

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.51	0.057	0.10	1.0	J
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	42.4	106	85 - 115	
1,2-Dichloroethane-d4	40.0	39.9	100	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	485580	5.13	92	5.13	
Chlorobenzene-d5	463774	8.08	91	8.08	
1,4-Dichlorobenzene-d4	261261	10.38	88	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET
USEPA-8082A

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water

Laboratory ID: 1201310-08

File ID: A87_093-0

Sampled: 01/23/12 14:30

Prepared: 01/25/12 08:27

Analyzed: 01/27/12 01:45

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 970 mL / 2 mL

QC Batch: 1201593

Sequence: 2B03015

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.206	0.176	85	40 - 135	
Tetrachloro-m-xylene	0.206	0.151	73	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-08

Sampled: 01/23/12 14:30

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	320	ug/L	8.1	10	20		01/30/12 16:03

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-08

Sampled: 01/23/12 14:30

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.79	ug/L	0.20	0.50	1.0	J	01/31/12 16:41

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-FB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-08

Sampled: 01/23/12 14:30

Prepared: 01/24/12 10:38

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201753

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	0.5	ug/L	0.3	1.0	1.0	J	01/24/12 11:32

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-03

File ID: 1201244-03.D

Sampled: 01/18/12 08:20

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:28

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-03

File ID: 1201244-03.D

Sampled: 01/18/12 08:20

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 11:28

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	6.4	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.1	100	70 - 120	
Toluene-d8	40.0	40.5	101	85 - 120	
4-Bromofluorobenzene	40.0	38.4	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	533503	5.13	89	5.13	
Chlorobenzene-d5	498059	8.08	90	8.08	
1,4-Dichlorobenzene-d4	268759	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water

Laboratory ID: 1201244-03

File ID: A87 025-0

Sampled: 01/18/12 08:20

Prepared: 01/23/12 11:04

Analyzed: 01/25/12 19:15

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 980 mL / 2 mL

QC Batch: 1201461

Sequence: 2A31043

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.080	0.054	0.080	0.20	U
11104-28-2	PCB-1221	1	0.080	0.045	0.080	0.20	U
11141-16-5	PCB-1232	1	0.080	0.041	0.080	0.20	U
53469-21-9	PCB-1242	1	0.080	0.062	0.080	0.20	U
12672-29-6	PCB-1248	1	0.080	0.054	0.080	0.20	U
11097-69-1	PCB-1254	1	0.080	0.053	0.080	0.20	U
11096-82-5	PCB-1260	1	0.080	0.029	0.080	0.20	U
37324-23-5	PCB-1262	1	0.080	0.080	0.080	0.20	U
11100-14-4	PCB-1268	1	0.080	0.040	0.080	0.20	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.204	0.189	93	40 - 135	
Tetrachloro-m-xylene	0.204	0.150	74	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-03

Sampled: 01/18/12 08:20

Prepared: 01/23/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201435

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	29	ug/L	8.1	10	20		01/30/12 13:06

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-03

Sampled: 01/18/12 08:20

Prepared: 01/24/12 07:00

Solids: 0.00

Preparation: General Metals Prep

QC Batch: 1201439

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Dissolved	1	10	ug/L	8.1	10	20	U	01/26/12 14:34

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-03

Sampled: 01/18/12 08:20

Prepared: 01/20/12 05:30

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201434

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 15:40

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-03

Sampled: 01/18/12 08:20

Prepared: 01/24/12 07:00

Solids: 0.00

Preparation: General Metals Prep

QC Batch: 1201438

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Dissolved	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 14:59

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-RB01-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-03

Sampled: 01/18/12 08:20

Prepared: 01/19/12 10:34

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201625

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	0.4	ug/L	0.3	1.0	1.0	J	01/19/12 11:19

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-06

File ID: 1201310-06.D

Sampled: 01/23/12 13:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:32

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-06

File ID: 1201310-06.D

Sampled: 01/23/12 13:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:32

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	6.5	0.18	0.50	1.0	
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.5	104	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	40.6	102	85 - 120	
4-Bromofluorobenzene	40.0	38.7	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	503272	5.13	95	5.13	
Chlorobenzene-d5	473597	8.08	93	8.08	
1,4-Dichlorobenzene-d4	257827	10.38	87	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8082A

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO W

Matrix: Water

Laboratory ID: 1201310-06

File ID: A87 089-0

Sampled: 01/23/12 13:30

Prepared: 01/25/12 08:27

Analyzed: 01/27/12 00:08

Solids:

Preparation: 3510C Liquid-Liquid Ex

Initial/Final: 850 mL / 2 mL

QC Batch: 1201593

Sequence: 2B06054

Calibration: 2A20001

Instrument: 144

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
12674-11-2	PCB-1016	1	0.094	0.063	0.094	0.24	U
11104-28-2	PCB-1221	1	0.094	0.053	0.094	0.24	U
11141-16-5	PCB-1232	1	0.094	0.048	0.094	0.24	U
53469-21-9	PCB-1242	1	0.094	0.073	0.094	0.24	U
12672-29-6	PCB-1248	1	0.094	0.064	0.094	0.24	U
11097-69-1	PCB-1254	1	0.094	0.063	0.094	0.24	U
11096-82-5	PCB-1260	1	0.094	0.034	0.094	0.24	U
37324-23-5	PCB-1262	1	0.094	0.094	0.094	0.24	U
11100-14-4	PCB-1268	1	0.094	0.047	0.094	0.24	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
Decachlorobiphenyl	0.235	0.239	102	40 - 135	
Tetrachloro-m-xylene	0.235	0.175	74	36 - 114	

* Values outside of QC limits

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-06

Sampled: 01/23/12 13:30

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3010A Digestion

QC Batch: 1201621

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7439-89-6	Iron, Total	1	12	ug/L	8.1	10	20	J	01/30/12 15:54

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-06

Sampled: 01/23/12 13:30

Prepared: 01/27/12 07:00

Solids: 0.00

Preparation: 3020A Digestion

QC Batch: 1201622

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
7440-47-3	Chromium, Total	1	0.50	ug/L	0.20	0.50	1.0	U	01/31/12 16:39

INORGANIC ANALYSIS DATA SHEET
USEPA-7196A

BPS1-RB02-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECHNUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-06

Sampled: 01/23/12 13:30

Prepared: 01/24/12 10:38

Solids: 0.00

Preparation: Method-Specific Preparation

QC Batch: 1201753

Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	DL	LOD	LOQ	Q	Analyzed
18540-29-9	Chromium, Hexavalent-Dissolved	1	1.0	ug/L	0.3	1.0	1.0	U	01/24/12 11:26

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPSI-TT-TB1019

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Water

Laboratory ID: 1110398-08

File ID: 1110398-08.D

Sampled: 10/19/11 08:00

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 17:01

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1112065

Sequence: 1J31056

Calibration: 1J28012

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	19	0.66	1.0	10	
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	2.3	0.28	0.50	5.0	J

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPSI-TT-TB1019

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-9

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 6-CTO WE44

Matrix: Water

Laboratory ID: 1110398-08

File ID: 1110398-08.D

Sampled: 10/19/11 08:00

Prepared: 10/31/11 07:00

Analyzed: 10/31/11 17:01

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1112065

Sequence: 1J31056

Calibration: 1J28012

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.070	0.057	0.10	1.0	J
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.6	104	85 - 115	
1,2-Dichloroethane-d4	40.0	38.8	97	70 - 120	
Toluene-d8	40.0	38.2	95	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
Fluorobenzene	670510	5.13	746237	5.13	
Chlorobenzene-d5	492287	8.08	548111	8.08	
1,4-Dichlorobenzene-d4	260954	10.38	303977	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201112-01

File ID: 1201112-01.D

Sampled: 01/10/12 12:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 16:29

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB-01102012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201112-01

File ID: 1201112-01.D

Sampled: 01/10/12 12:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 16:29

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.1	100	85 - 115	
1,2-Dichloroethane-d4	40.0	40.3	101	70 - 120	
Toluene-d8	40.0	39.9	100	85 - 120	
4-Bromofluorobenzene	40.0	39.5	99	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	630847	5.13	94	5.13	
Chlorobenzene-d5	566164	8.08	94	8.08	
1,4-Dichlorobenzene-d4	309320	10.38	91	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201126-01

File ID: 1201126-01.D

Sampled: 01/11/12 08:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 16:57

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB-01112012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201126-01

File ID: 1201126-01.D

Sampled: 01/11/12 08:00

Prepared: 01/18/12 13:00

Analyzed: 01/18/12 16:57

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201389

Sequence: 2A19006

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	40.3	101	85 - 115	
1,2-Dichloroethane-d4	40.0	40.2	100	70 - 120	
Toluene-d8	40.0	39.8	100	85 - 120	
4-Bromofluorobenzene	40.0	39.1	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	623326	5.13	93	5.13	
Chlorobenzene-d5	562862	8.08	93	8.08	
1,4-Dichlorobenzene-d4	303695	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB01-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201218-01

File ID: 1201218-01.D

Sampled: 01/16/12 09:35

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 11:00

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.0	0.66	1.0	10	U
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB01-01162012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201218-01

File ID: 1201218-01.D

Sampled: 01/16/12 09:35

Prepared: 01/23/12 08:00

Analyzed: 01/23/12 11:00

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201552

Sequence: 2A24017

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	39.8	99	85 - 115	
1,2-Dichloroethane-d4	40.0	39.3	98	70 - 120	
Toluene-d8	40.0	40.4	101	85 - 120	
4-Bromofluorobenzene	40.0	39.3	98	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	593671	5.13	99	5.13	
Chlorobenzene-d5	554448	8.08	97	8.08	
1,4-Dichlorobenzene-d4	306295	10.38	90	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB02-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-01

File ID: 1201244-01.D

Sampled: 01/18/12 08:00

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 10:33

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	2.5	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.48	0.27	0.50	5.0	J
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB02-01182012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-12

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201244-01

File ID: 1201244-01.D

Sampled: 01/18/12 08:00

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 10:33

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.1	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	40.5	101	85 - 120	
4-Bromofluorobenzene	40.0	38.3	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	542121	5.13	91	5.13	
Chlorobenzene-d5	507994	8.08	92	8.08	
1,4-Dichlorobenzene-d4	269865	10.38	84	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201254-01

File ID: 1201254-01.D

Sampled: 01/19/12 07:45

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 14:14

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	3.0	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB03-01192012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201254-01

File ID: 1201254-01.D

Sampled: 01/19/12 07:45

Prepared: 01/24/12 08:00

Analyzed: 01/24/12 14:14

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201603

Sequence: 2A25008

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.8	104	85 - 115	
1,2-Dichloroethane-d4	40.0	40.7	102	70 - 120	
Toluene-d8	40.0	40.6	101	85 - 120	
4-Bromofluorobenzene	40.0	38.2	95	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	525118	5.13	88	5.13	
Chlorobenzene-d5	495767	8.08	90	8.08	
1,4-Dichlorobenzene-d4	264019	10.38	82	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB04-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201287-01

File ID: 1201287-01.D

Sampled: 01/20/12 07:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 10:36

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	1.4	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB04-01202012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201287-01

File ID: 1201287-01.D

Sampled: 01/20/12 07:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 10:36

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.2	98	70 - 120	
Toluene-d8	40.0	40.8	102	85 - 120	
4-Bromofluorobenzene	40.0	38.4	96	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	521127	5.13	98	5.13	
Chlorobenzene-d5	489374	8.08	96	8.08	
1,4-Dichlorobenzene-d4	262068	10.38	89	10.38	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB05-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-01

File ID: 1201310-01.D

Sampled: 01/23/12 07:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:04

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	1	2.8	0.66	1.0	10	J
71-43-2	Benzene	1	0.50	0.12	0.50	1.0	U
74-97-5	Bromochloromethane	1	0.50	0.16	0.50	1.0	U
75-27-4	Bromodichloromethane	1	0.50	0.13	0.50	1.0	U
75-25-2	Bromoform	1	0.25	0.10	0.25	1.0	U
74-83-9	Bromomethane	1	0.50	0.28	0.50	1.0	U
75-15-0	Carbon Disulfide	1	0.50	0.19	0.50	5.0	U
56-23-5	Carbon Tetrachloride	1	0.50	0.14	0.50	1.0	U
108-90-7	Chlorobenzene	1	0.50	0.13	0.50	1.0	U
75-00-3	Chloroethane	1	0.50	0.15	0.50	1.0	U
67-66-3	Chloroform	1	0.50	0.16	0.50	1.0	U
74-87-3	Chloromethane	1	0.50	0.18	0.50	1.0	U
110-82-7	Cyclohexane	1	0.50	0.29	0.50	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	0.25	0.50	2.0	U
124-48-1	Dibromochloromethane	1	0.25	0.094	0.25	1.0	U
106-93-4	1,2-Dibromoethane	1	0.25	0.11	0.25	1.0	U
95-50-1	1,2-Dichlorobenzene	1	0.50	0.15	0.50	1.0	U
541-73-1	1,3-Dichlorobenzene	1	0.25	0.11	0.25	1.0	U
106-46-7	1,4-Dichlorobenzene	1	0.50	0.16	0.50	1.0	U
75-71-8	Dichlorodifluoromethane	1	0.50	0.25	0.50	1.0	U
75-34-3	1,1-Dichloroethane	1	0.50	0.19	0.50	1.0	U
107-06-2	1,2-Dichloroethane	1	0.50	0.12	0.50	1.0	U
75-35-4	1,1-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.50	0.17	0.50	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.50	0.11	0.50	1.0	U
78-87-5	1,2-Dichloropropane	1	0.50	0.15	0.50	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	0.10	0.050	0.10	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	0.25	0.11	0.25	1.0	U
123-91-1	1,4-Dioxane	1	25	10	25	50	U
100-41-4	Ethylbenzene	1	0.25	0.11	0.25	1.0	U
591-78-6	2-Hexanone	1	0.50	0.24	0.50	5.0	U
98-82-8	Isopropylbenzene	1	0.50	0.17	0.50	1.0	U
79-20-9	Methyl Acetate	1	0.50	0.27	0.50	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.50	0.13	0.50	1.0	U
108-87-2	Methylcyclohexane	1	0.50	0.23	0.50	5.0	U
75-09-2	Methylene Chloride	1	0.50	0.35	0.50	1.0	U
78-93-3	2-Butanone (MEK)	1	0.50	0.28	0.50	5.0	U

ORGANIC ANALYSIS DATA SHEET

USEPA-8260B

BPS1-TB05-01232012

Laboratory: TriMatrix Laboratories, Inc.

SDG: 50063-13

Client: TETRA TECH NUS - Pittsburgh

Project: NWIRP Bethpage, NY 01-CTO WE44(04)

Matrix: Water

Laboratory ID: 1201310-01

File ID: 1201310-01.D

Sampled: 01/23/12 07:30

Prepared: 01/26/12 08:00

Analyzed: 01/26/12 11:04

Solids:

Preparation: 5030B Aqueous Purge &

Initial/Final: 5 mL / 5 mL

QC Batch: 1201663

Sequence: 2A26019

Calibration: 2A18010

Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	DL	LOD	LOQ	Q
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.50	0.23	0.50	5.0	U
100-42-5	Styrene	1	0.10	0.056	0.10	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	0.12	0.50	1.0	U
127-18-4	Tetrachloroethene	1	0.50	0.16	0.50	1.0	U
108-88-3	Toluene	1	0.10	0.057	0.10	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	0.14	0.50	2.0	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	0.15	0.50	2.0	U
71-55-6	1,1,1-Trichloroethane	1	0.50	0.14	0.50	1.0	U
79-00-5	1,1,2-Trichloroethane	1	0.50	0.15	0.50	1.0	U
79-01-6	Trichloroethene	1	0.50	0.18	0.50	1.0	U
75-69-4	Trichlorofluoromethane	1	0.50	0.18	0.50	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.50	0.22	0.50	1.0	U
75-01-4	Vinyl Chloride	1	0.50	0.24	0.50	1.0	U
179601-23-1	Xylene, Meta + Para	1	0.50	0.29	0.50	2.0	U
95-47-6	Xylene, Ortho	1	0.25	0.10	0.25	1.0	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% REC.	QC Limits	Q
Dibromofluoromethane	40.0	41.4	103	85 - 115	
1,2-Dichloroethane-d4	40.0	39.7	99	70 - 120	
Toluene-d8	40.0	41.0	102	85 - 120	
4-Bromofluorobenzene	40.0	38.7	97	75 - 120	

Internal Standard	Area	RT	% REC.	Ref. RT	Q
Fluorobenzene	512195	5.13	97	5.13	
Chlorobenzene-d5	480926	8.08	95	8.08	
1,4-Dichlorobenzene-d4	260078	10.38	88	10.38	

* Values outside of QC limits

Appendix D
Validation Summaries



Tetra Tech

INTERNAL CORRESPONDENCE

TO: R. SOK **DATE: FEBRUARY 17, 2012**
FROM: A. COGNETTI **COPIES: DV FILE**
SUBJECT: ORGANIC AND INORGANIC DATA VALIDATION – VOC / PCB / METALS / MISCELLANEOUS
NWIRP BETHPAGE CTO WE44
SAMPLE DELIVERY GROUP (SDG) – 50063-9

SAMPLES: 3/Aqueous/VOC

BPSI-SW3001 BPSI-SW3002 BPSI-TT-TB1019

5/Soil/PCB

BPSI-TT-MW309-0005 BPSI-TT-MW309-0510 BPSI-TT-MW309-1015
BPSI-TT-MW309-1520 BPSI-TT-MW309-2025

2/Aqueous/PCB/Metals

BPSI-SW3001 BPSI-SW3002

Overview

The sample set for NWIRP Bethpage, CTO WE44, SDG 50063-9 consists of two (2) aqueous environmental samples and a trip blank analyzed for volatile organic compounds (VOCs). Five (5) soil environmental samples and two (2) aqueous environmental samples were analyzed for polychlorinated biphenyls (PCBs). Two (2) aqueous environmental samples were analyzed for iron, total chromium and dissolved hexavalent chromium. The soil samples were analyzed for percent solids.

The samples were collected by Tetra Tech on October 19, 2011 and analyzed by Trimatrix Laboratories. Analyses were conducted in accordance with EPA Methods SW-846 8260B, 8082, 6010C, 6020A, 7196A and 3550B analysis and reporting protocol. The data contained in this SDG were validated with regard to the following parameters:

- * • Data completeness
- * • Holding times
- * • GC/MS Tuning
- Initial/continuing calibrations
- * • Laboratory Method Blank/Field Blank Results
- * • Surrogate Recoveries
- * • Matrix Spike / Matrix Spike Duplicate Recoveries
- * • Laboratory Control Sample Recoveries
- * • Internal Standard Recoveries
- * • ICP Interference Results
- * • ICP Serial Dilution Results
- * • Compound Quantitation
- * • Compound Identification
- * • Detection Limits

TO: R. Sok
FROM: A. Cognetti
SDG: 50063-9
DATE: February 17, 2012
PAGE: 2

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

Volatile

In the initial and continuing calibrations on October 27, 2011 and October 31, 2011 @ 8:11, 1,4-dioxane had a relative retention factor (RRF) less than the 0.05 quality control limit. The nondetected 1,4-dioxane results were qualified as rejected (UR) in the affected samples.

In the continuing calibration on October 31, 2011 @ 8:11, bromomethane and 2-hexanone had percent differences (%Ds) greater than the 20% quality control limit. The nondetected bromomethane and 2-hexanone results were qualified as estimated (UJ) in the affected samples.

Contamination was detected in the trip blank, BPSI-TT-TB1019.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
2-butanone	2.3	23
Acetone	19	190
Toluene	0.07	0.35

An action level of 10X the maximum concentration of common laboratory contaminants, acetone and 2-butanone, and 5X the maximum concentration of toluene was established on order to evaluate samples for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into account when applying the action level. Positive results less than the action level were qualified as (U).

PCB

All detected Aroclor 1248 results were qualified as estimated (J) because the laboratory indicated that a conclusive PCB Aroclor identification was not possible due to matrix interference and/or weathering of the sample. Method blank chromatograms did not indicate any contamination was present. The data reviewer examined the pattern and agreed with the laboratory regarding the Aroclor 1248 identification even though the pattern appears likely to contain another Aroclor mixture.

Additional Comments

Sample BPSI-TT-TB1019 was not listed on the chain of custody. The sample was added onto the chain of custody per Tetra Tech's request.

Contamination was detected in the continuing calibration blanks and method blank in the metals fraction.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Iron ⁽¹⁾	9.0	45.0
Chromium ⁽²⁾	-0.21	1.05

(1) Maximum concentration detected in method blank associated with batch 1112149.

(2) Maximum concentration detected in continuing calibration blank 2 analyzed on November 4, 2011 @ 8:21.

TO: R. Sok
FROM: A. Cognetti
SDG: 50063-9
DATE: February 17, 2012
PAGE: 3

An action level of 5X the maximum concentration was established on order to evaluate samples for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into account when applying the action level. No action was taken for the negative signal drift for chromium because the negative value was greater than the negative limit of detection.

The serial dilution %Ds for iron and chromium were greater than the 10% quality control limit. No action was taken because the sample concentration was less than 50X the IDL.

Positive results below the Reporting Limit (RL) and above the detection limit were qualified as estimated, (J), due to uncertainty near the detection limit.

Nondetected results are reported to the limit of detection (LOD).

EXECUTIVE SUMMARY

Laboratory Performance Issues: 1,4-dioxane had a RRF less than the 0.05 quality control limit resulting in the rejection of nondetected results. Bromomethane and 2-hexanone had %Ds greater than the 20% quality control limit resulting in the qualification of data. All detected Aroclor 1248 results were qualified as estimated (J) because the laboratory indicated that a conclusive PCB Aroclor identification was not possible due to matrix interference and/or weathering of the sample.

Other Factors Affecting Data Quality: BPSI-TT-TB1019 contained acetone, 2-butanone and toluene.

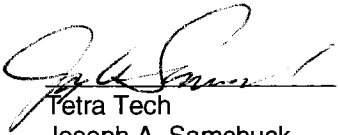
The data for these analyses were reviewed with reference to SOP # HW-24 Revision #2, August 2008, USEPA Region II Hazardous Waste Support Branch Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846/8260B, SOP # HW-45 Revision #1, October 2006, USEPA Region II Hazardous Waste Support Branch Validating PCB Compounds by Gas Chromatography SW-846 Method 8082A, SOP# HW-2, Revision 13, September 2006, Validation of Metals for the Contract Laboratory Program (CLP) based on the SOW ILM05.3, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

TO: R. Sok
FROM: A. Cagnetti
SDG: 50063-9
DATE: February 17, 2012
PAGE: 4

The text of this report has been formulated to address only those problem areas affecting data quality.



Tetra Tech
Ann Cagnetti
Chemist/Data Validator



Tetra Tech
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Region II Data Validation Forms
4. Appendix D - Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $< \text{CRQL}$ for organics)
- Q = Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors $> 40\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $< 30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 02230 SDG: 50063-9 FRACTION: OV MEDIA: WATER	NSAMPLE	BPSI-SW3001			BPSI-SW3002			BPSI-TT-TB1019		
	LAB_ID	1110398-01			1110398-02			1110398-08		
	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		2.3	J	P
2-HEXANONE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U	B	19		
BENZENE		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-9 FRACTION: OV MEDIA: WATER	NSAMPLE	BPSI-SW3001			BPSI-SW3002			BPSI-TT-TB1019		
	LAB_ID	1110398-01			1110398-02			1110398-08		
	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.5	U		0.5	U	
TOLUENE		0.1	U		0.1	U		0.07	J	P
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.5	U		0.5	U		0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-9 FRACTION: PCB MEDIA: SOIL	NSAMPLE	BPSI-TT-MW309-0005			BPSI-TT-MW309-0005RE1			BPSI-TT-MW309-0510			BPSI-TT-MW309-0510RE1		
	LAB_ID	1110398-06			1110398-06RE1			1110398-07			1110398-07RE1		
	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011			10/19/2011		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	96.0			96.0			96.0			96.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.017	U					0.017	U				
AROCLOR-1221		0.017	U					0.017	U				
AROCLOR-1232		0.007	U					0.007	U				
AROCLOR-1242		0.017	U					0.017	U				
AROCLOR-1248					1.3	J	Q				0.72	J	Q
AROCLOR-1254		0.007	U					0.007	U				
AROCLOR-1260		0.017	U					0.017	U				
AROCLOR-1262		0.007	U					0.007	U				
AROCLOR-1268		0.007	U					0.007	U				

PROJ_NO: 02230 SDG: 50063-9 FRACTION: PCB MEDIA: SOIL	NSAMPLE	BPSI-TT-MW309-1015			BPSI-TT-MW309-1015RE1			BPSI-TT-MW309-1520			BPSI-TT-MW309-1520RE1		
	LAB_ID	1110398-05			1110398-05RE1			1110398-03			1110398-03RE1		
	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011			10/19/2011		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	95.0			95.0			96.0			96.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.018	U					0.017	U				
AROCLOR-1221		0.018	U					0.017	U				
AROCLOR-1232		0.007	U					0.007	U				
AROCLOR-1242		0.018	U					0.017	U				
AROCLOR-1248					7	J	Q				2.9	J	Q
AROCLOR-1254		0.007	U					0.007	U				
AROCLOR-1260		0.018	U					0.017	U				
AROCLOR-1262		0.007	U					0.007	U				
AROCLOR-1268		0.007	U					0.007	U				

PROJ_NO: 02230 SDG: 50063-9 FRACTION: PCB MEDIA: SOIL	NSAMPLE	BPSI-TT-MW309-2025			BPSI-TT-MW309-2025RE1		
	LAB_ID	1110398-04			1110398-04RE1		
	SAMP_DATE	10/19/2011			10/19/2011		
	QC_TYPE	NM			NM		
	UNITS	MG/KG			MG/KG		
	PCT_SOLIDS	97.0			97.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.017	U				
AROCLOR-1221		0.017	U				
AROCLOR-1232		0.0069	U				
AROCLOR-1242		0.017	U				
AROCLOR-1248					0.46	J	Q
AROCLOR-1254		0.0069	U				
AROCLOR-1260		0.017	U				
AROCLOR-1262		0.0069	U				
AROCLOR-1268		0.0069	U				

PROJ_NO: 02230 SDG: 50063-9 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPSI-SW3001			BPSI-SW3001RE1			BPSI-SW3002		
	LAB_ID	1110398-01			1110398-01RE1			1110398-02		
	SAMP_DATE	10/19/2011			10/19/2011			10/19/2011		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.1	U	
AROCLOR-1221		0.08	U					0.1	U	
AROCLOR-1232		0.08	U					0.1	U	
AROCLOR-1242		0.08	U					0.1	U	
AROCLOR-1248					0.35	J	Q	0.1	U	
AROCLOR-1254		0.08	U					0.1	U	
AROCLOR-1260		0.08	U					0.1	U	
AROCLOR-1262		0.08	U					0.1	U	
AROCLOR-1268		0.08	U					0.1	U	

PROJ_NO: 02230 SDG: 50063-9 FRACTION: M MEDIA: WATER	NSAMPLE	BPSI-SW3001			BPSI-SW3002		
	LAB_ID	1110398-01			1110398-02		
	SAMP_DATE	10/19/2011			10/19/2011		
	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		2.4			0.84	J	P
IRON		240			150		

PROJ_NO: 02230 SDG: 50063-9 FRACTION: MISC MEDIA: WATER	NSAMPLE	BPSI-SW3001			BPSI-SW3002		
	LAB_ID	1110398-01			1110398-02		
	SAMP_DATE	10/19/2011			10/19/2011		
	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.4	J	P	0.4	J	P

**Tetra Tech INC****INTERNAL CORRESPONDENCE**

TO: R. SOK **DATE:** MARCH 28, 2012
FROM: JOSEPH KALINYAK **COPIES:** DV FILE
SUBJECT: ORGANIC DATA VALIDATION – VOC, PCB
NWIRP BETHPAGE, CTO WE44
SAMPLE DELIVERY GROUP SDG 50063-12

SAMPLES: 27 / Aqueous / VOC

BPS1-Dup01-01172012	BPS1-FB01-01182012	BPS1-FW-MW02-01172012
BPS1-RB01-01182012	BPS1-TB-01102012	BPS1-TB-01112012
BPS1-TB01-01162012	BPS1-TB02-01182012	BPS1-TT-Dup02-01182012
BPS1-TT-MW301D-01172012	BPS1-TT-MW301I-01172012	BPS1-TT-MW301S-01172012
BPS1-TT-MW304I1-01182012	BPS1-TT-MW304S-01182012	BPS1-TT-MW305D-01172012
BPS1-TT-MW305I-01172012	BPS1-TT-MW305S-01172012	BPS1-TT-MW307D-01182012
BPS1-TT-MW307I-01182012	BPS1-TT-MW307S-01182012	BPS1-TT-MW308D-01162012
BPS1-TT-MW308I-01162012	BPS1-TT-MW308S-01162012	BPS1-TT-MW309D-01112012
BPS1-TT-MW309I-01112012	BPS1-TT-MW309S-01102012	BPS1-TTMW-304I2-01182012

23 / Aqueous / PCB

BPS1-Dup01-01172012	BPS1-FB01-01182012	BPS1-FW-MW02-01172012
BPS1-RB01-01182012	BPS1-TT-Dup02-01182012	BPS1-TT-MW301D-01172012
BPS1-TT-MW301I-01172012	BPS1-TT-MW301S-01172012	BPS1-TT-MW304I1-01182012
BPS1-TT-MW304S-01182012	BPS1-TT-MW305D-01172012	BPS1-TT-MW305I-01172012
BPS1-TT-MW305S-01172012	BPS1-TT-MW307D-01182012	BPS1-TT-MW307I-01182012
BPS1-TT-MW307S-01182012	BPS1-TT-MW308D-01162012	BPS1-TT-MW308I-01162012
BPS1-TT-MW308S-01162012	BPS1-TT-MW309D-01112012	BPS1-TT-MW309I-01112012
BPS1-TT-MW309S-01102012	BPS1-TTMW-304I2-01182012	

Overview

The sample set for NWIRP Bethpage, CTO WE44, SDG 50063-12 consisted of twenty-seven (27) aqueous samples, including one (1) aqueous rinse blank sample, one (1) aqueous field blank sample, and four (4) aqueous trip blank samples. All of the aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. Twenty-three (23) of the aqueous samples were analyzed for polychlorinated biphenyls (PCB) as listed above. Two field duplicate sample pairs were included with this sample delivery group (SDG): BPS1-Dup01-01172012 / BPS1-TT-MW305S-01172012 and BPS1-TT-Dup02-01182012 / BPS1-TTMW-304I2-01182012.

The samples were collected by Tetra Tech on January 10, 11, 16, 17, and 18, 2012 and analyzed by Trimatrix Laboratories Inc. All analyses were conducted in accordance with EPA Methods SW-846 8260B for VOC and 8082 for PCB, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

- * • Data completeness
- * • Hold times
- * • GC/MS System Tuning and Performance
- Initial/continuing Calibrations

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- Method Blank Results
- * • Laboratory Control Sample Recovery
- * • Matrix Spike/Matrix Spike Duplicate Recoveries
- * • Surrogate Spike Recoveries
- * • Internal Standard Recoveries
- * • Field Duplicate Precision
- * • Compound Identification
- * • Compound Quantitation
- * • Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

VOC

The following VOC contaminant was detected in the method blank at the following maximum concentrations.

Analyte	Maximum Conc. µg/L	Action Level µg/L
Methyl acetate ⁽¹⁾	0.32	1.60

- ⁽¹⁾ Method blank for batch 1201603 affecting samples BPS1-TT-MW301I-01172012, BPS1-FW-MW02-01172012, BPS1-TB02-01182012, BPS1-FB01-01182012, BPS1-RB01-01182012, BPS1-TT-MW307D-01182012, BPS1-TT-MW304S-01182012, and BPS1-TT-MW307S-01182012.

An action level of five times the maximum level for methyl acetate has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results less than the action level were qualified non-detected, (U). Acetone was detected in the trip blank samples BPS1-TB02-01182012. As none of the samples had positive acetone detections, no validation action for trip blank acetone contamination was necessary.

The initial calibration average relative response factor (RRF) was less than the 0.05 quality control limit for 1,4-dioxane for instrument 224 on 01/17/12 and on all continuing calibration verifications (CCV).

Affected samples: All samples

Action: The non-detected 1,4-dioxane results for all samples were qualified rejected, (UR).

The continuing calibration verification (CCV) %Ds were greater than the 20% quality control limit for bromomethane and 1,4-dioxane for instrument 224 on 01/23/11 @ 09:09 affecting the samples listed.

Affected samples:

BPS1-TB01-01162012	BPS1-TT-MW308D-01162012	BPS1-TT-MW308I-01162012
BPS1-TT-MW308S-01162012	BPS1-TT-MW301D-01172012	BPS1-TT-MW305S-01172012
BPS1-TT-MW301S-01172012	BPS1-TT-MW305I-01172012	BPS1-TT-MW305D-01172012
BPS1-TT-MW304I1-01182012	BPS1-TT-MW307I-01182012	BPS1-TTMW-304I2-01182012
BPS1-TT-Dup02-01182012	BPS1-Dup01-01172012	

Action: The non-detected bromomethane results for the samples were qualified estimated, (UU). No validation action was necessary for the non-detected 1,4-dioxane sample results as they were qualified rejected as previously describe for an RRF quality control limit non-compliances.

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The CCV %Ds were greater than the 20% quality control limit for bromomethane and dichlorodifluoromethane for instrument 224 on 01/24/11 @ 08:42 affecting the samples listed.

Affected samples:

BPS1-TB02-01182012 BPS1-FB01-01182012 BPS1-RB01-01182012
BPS1-TT-MW307D-01182012 BPS1-TT-MW304S-01182012
BPS1-TT-MW307S-01182012 BPS1-TT-MW301I-01172012 BPS1-FW-MW02-01172012
BPS1-TT-MW305I-01172012RE dilution re-analysis

Action: The sample non-detected bromomethane and dichlorodifluoromethane results were qualified estimated, (UJ). The sample BPS1-TT-MW305I-01172012RE dilution re-analysis results were not qualified as only the trichloroethene results was reported from the sample re-analysis.

PCB

The samples BPS1-TT-MW301D-01172012 (25.2%) and BPS1-TT-MW305D-01172012 (35.1%) had relative percent differences (RPD) between the two analytical column Aroclor-1242 positive results greater than the 25% quality control limit. The aforementioned sample positive Aroclor-1242 results were qualified estimated, (J).

All method blanks were clean (non-detected for all Aroclors).

Additional Comments

The sample BPS1-TT-MW305I-01172012 VOC tetrachloroethene result exceeded the highest calibration standard for the sample undiluted analysis. The sample was re-analyzed at a 50X dilution. Only the tetrachloroethene result was reported from the sample BPS1-TT-MW305I-01172012 50X dilution analysis.

Samples were diluted for the Aroclor-1248 analysis as listed below.

<u>Sample</u>	<u>Dilution</u>
BPS1-TT-Dup02-01182012	2X
BPS1-TT-MW301S-01172012	10X
BPS1-TT-MW305I-01172012	2X
BPS1-TTMW-304I2-01182012	2X

The rinse blank sample BPS1-RB01-01182012 and field blank sample BPS1-FB01-01182012 had positive detections for trichloroethene. Trichloroethene was not detected in any of the trip blanks and laboratory method blanks. No validation action was taken by the data reviewer for field or rinse blank contamination.

The DB-35 column (column 1) results were reported by the laboratory for the positive Aroclor results.

The laboratory did not provide Aroclor %Ds for all of the CCVs. The data validation chemist manually calculated the CCV %Ds to verify that they were quality control compliant.

Surrogate results were diluted out in the sample BPS1-TT-MW301S-01172012 10X dilution Aroclor-1248 analysis.

Sample VOC and Aroclor analyte results were reported to the Limit of Detection (LOD).

Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

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EXECUTIVE SUMMARY

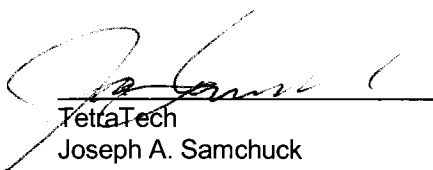
Laboratory Performance Issues: VOC sample analyte results were qualified for initial calibration RRF and CCV %D quality control limit non-compliances.

Other Factors Affecting Data Quality: Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit. Sample positive Aroclor results were qualified due to analytical column RPD quality control limit non-compliances.

The data for these analyses were reviewed with reference to the SOP HW-24 Revision #2 - August 2008 Validating Volatile Organic Compounds by SW-846 Method 8260B, SOP HW-45 Revision 1 - October 2006 Data Validation SOP of Organic Analysis of PCBs by Gas Chromatography, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).



TetraTech
Joseph Kalinyak
Chemist/Data Validator



TetraTech
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A - Qualified Analytical Results
Appendix B - Results as Reported by the Laboratory
Appendix C - Region II Data Validation Forms
Appendix D - Support Documentation

Appendix A

Qualified Analytical Results

Value Qualifier Key (Val Qual)

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $< CRQL$ for organics)
Q	=	Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors $> 40\%$ for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids $< 30\%$
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-Dup01-01172012			BPS1-FB01-01182012			BPS1-FW-MW02-01172012			BPS1-RB01-01182012		
	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03		
	SAMP_DATE	1/17/2012			1/18/2012			1/17/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW305S-01172012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.39	J	P	0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.36	J	P	0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TB01-01162012			BPS1-TB-01102012			BPS1-TB-01112012			BPS1-TB02-01182012		
	LAB_ID	1201218-01			1201112-01			1201126-01			1201244-01		
	SAMP_DATE	1/16/2012			1/10/2012			1/11/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		2.5	J	P
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	U		0.5	U		0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-Dup02-01182012			BPS1-TT-MW301D-01172012			BPS1-TT-MW301I-01172012			BPS1-TT-MW301S-01172012		
	LAB_ID	1201244-10			1201218-05			1201218-09			1201218-07		
	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/17/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TTMW-304I2-01182012											
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
1,1,1-TRICHLOROETHANE	0.23	J	P	0.53	J	P	0.5	U		0.5	U		
1,1,2,2-TETRACHLOROETHANE	0.5	U		0.5	U		0.5	U		0.5	U		
1,1,2-TRICHLOROETHANE	0.5	U		0.5	U		0.5	U		0.5	U		
1,1,2-TRICHLOROTRIFLUOROETHANE	0.5	U		0.5	U		0.5	U		0.5	U		
1,1-DICHLOROETHANE	0.5	U		0.22	J	P	0.5	U		0.5	U		
1,1-DICHLOROETHENE	0.5	U		0.5	U		0.5	U		0.5	U		
1,2,3-TRICHLOROBENZENE	0.5	U		0.5	U		0.5	U		0.5	U		
1,2,4-TRICHLOROBENZENE	0.5	U		0.5	U		0.5	U		0.5	U		
1,2-DIBROMO-3-CHLOROPROPANE	0.5	U		0.5	U		0.5	U		0.5	U		
1,2-DIBROMOETHANE	0.25	U		0.25	U		0.25	U		0.25	U		
1,2-DICHLOROBENZENE	0.5	U		0.5	U		0.5	U		0.5	U		
1,2-DICHLOROETHANE	0.5	U		0.5	U		0.5	U		0.5	U		
1,2-DICHLOROPROPANE	0.5	U		0.5	U		0.5	U		0.5	U		
1,3-DICHLOROBENZENE	0.25	U		0.25	U		0.25	U		0.25	U		
1,4-DICHLOROBENZENE	0.5	U		0.5	U		0.5	U		0.5	U		
1,4-DIOXANE	25	UR	C	25	UR	C	25	UR	C	25	UR	C	
2-BUTANONE	0.5	U		0.5	U		0.5	U		0.5	U		
2-HEXANONE	0.5	U		0.5	U		0.5	U		0.5	U		
4-METHYL-2-PENTANONE	0.5	U		0.5	U		0.5	U		0.5	U		
ACETONE	1	U		1	U		1	U		1	U		
BENZENE	0.5	U		0.5	U		0.5	U		0.5	U		
BROMOCHLOROMETHANE	0.5	U		0.5	U		0.5	U		0.5	U		
BROMODICHLOROMETHANE	0.5	U		0.5	U		0.5	U		0.5	U		
BROMOFORM	0.25	U		0.25	U		0.25	U		0.25	U		
BROMOMETHANE	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	
CARBON DISULFIDE	0.5	U		0.5	U		0.5	U		0.5	U		
CARBON TETRACHLORIDE	0.5	U		0.5	U		0.5	U		0.5	U		
CHLOROBENZENE	0.5	U		0.5	U		0.5	U		0.5	U		
CHLORODIBROMOMETHANE	0.25	U		0.25	U		0.25	U		0.25	U		
CHLOROETHANE	0.5	U		0.5	U		0.5	U		0.5	U		
CHLOROFORM	0.5	U		0.5	U		0.5	U		0.5	U		
CHLOROMETHANE	0.5	U		0.5	U		0.5	U		0.5	U		
CIS-1,2-DICHLOROETHENE	2.8			0.5	U		0.5	U		0.5	U		
CIS-1,3-DICHLOROPROPENE	0.1	U		0.1	U		0.1	U		0.1	U		
CYCLOHEXANE	0.5	U		0.5	U		0.5	U		0.5	U		

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW304I1-01182012			BPS1-TTMW-304I2-01182012			BPS1-TT-MW304S-01182012			BPS1-TT-MW305D-01172012		
	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10		
	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1.7			0.26	J	P	0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.33	J	P
1,1-DICHLOROETHANE		1.6			0.5	U		0.5	U		0.57	J	P
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.73	J	P
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.19	J	P
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		6			2.7			0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW305I-01172012			BPS1-TT-MW305I-01172012RE1			BPS1-TT-MW305S-01172012			BPS1-TT-MW307D-01182012		
	LAB_ID	1201218-08			1201218-08RE1			1201218-06			1201244-04		
	SAMP_DATE	1/17/2012			1/17/2012			1/17/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.28	J	P				0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U					0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U					0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		1.1						0.5	U		0.5	U	
1,1-DICHLOROETHANE		2.7						0.5	U		0.5	U	
1,1-DICHLOROETHENE		1.3						0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U					0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U					0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U					0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U					0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U					0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U					0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U					0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U					0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U					0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C				25	UR	C	25	UR	C
2-BUTANONE		0.5	U					0.5	U		0.5	U	
2-HEXANONE		0.5	U					0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U					0.5	U		0.5	U	
ACETONE		1	U					1	U		1	U	
BENZENE		0.5	U					0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U					0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U					0.5	U		0.5	U	
BROMOFORM		0.25	U					0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C				0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U					0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.49	J	P				0.5	U		0.5	U	
CHLOROBENZENE		0.5	U					0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U					0.25	U		0.25	U	
CHLOROETHANE		0.5	U					0.5	U		0.5	U	
CHLOROFORM		0.27	J	P				0.5	U		0.5	U	
CHLOROMETHANE		0.5	U					0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		4.7						0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U					0.1	U		0.1	U	
CYCLOHEXANE		0.5	U					0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW307I-01182012			BPS1-TT-MW307S-01182012			BPS1-TT-MW308D-01162012			BPS1-TT-MW308I-01162012		
	LAB_ID	1201244-07			1201244-09			1201218-02			1201218-03		
	SAMP_DATE	1/18/2012			1/18/2012			1/16/2012			1/16/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.23	J	P	0.24	J	P	0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.2	J	P	0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.19	J	P	0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW308S-01162012			BPS1-TT-MW309D-01112012			BPS1-TT-MW309I-01112012			BPS1-TT-MW309S-01102012		
	LAB_ID	1201218-04			1201126-03			1201126-02			1201112-02		
	SAMP_DATE	1/16/2012			1/11/2012			1/11/2012			1/10/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.45	J	P	0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.27	J	P	0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	U		0.5	U		0.5	U	
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	U		0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-Dup01-01172012			BPS1-FB01-01182012			BPS1-FW-MW02-01172012			BPS1-RB01-01182012		
	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03		
	SAMP_DATE	1/17/2012			1/18/2012			1/17/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW305S-01172012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5 U			0.5 UJ	C		0.5 UJ	C		0.5 UJ	C	
ETHYLBENZENE		0.25 U			0.25 U			0.25 U			0.25 U		
ISOPROPYLBENZENE		0.5 U			0.5 U			0.5 U			0.5 U		
M+P-XYLENES		0.5 U			0.5 U			0.5 U			0.5 U		
METHYL ACETATE		0.5 U			0.56 U	A		0.5 U			0.5 U		
METHYL CYCLOHEXANE		0.5 U			0.5 U			0.5 U			0.5 U		
METHYL TERT-BUTYL ETHER		0.5 U			0.5 U			0.35 J	P		0.5 U		
METHYLENE CHLORIDE		0.5 U			0.5 U			0.5 U			0.5 U		
O-XYLENE		0.25 U			0.25 U			0.25 U			0.25 U		
STYRENE		0.1 U			0.1 U			0.1 U			0.1 U		
TETRACHLOROETHENE		0.5 U			0.5 U			21			0.5 U		
TOLUENE		0.1 U			0.1 U			0.1 U			0.1 U		
TRANS-1,2-DICHLOROETHENE		0.5 U			0.5 U			0.5 U			0.5 U		
TRANS-1,3-DICHLOROPROPENE		0.25 U			0.25 U			0.25 U			0.25 U		
TRICHLOROETHENE		0.5 U			7			2.7			6.4		
TRICHLOROFLUOROMETHANE		0.5 U			0.5 U			0.5 U			0.5 U		
VINYL CHLORIDE		0.5 U			0.5 U			0.5 U			0.5 U		

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TB01-01162012			BPS1-TB-01102012			BPS1-TB-01112012			BPS1-TB02-01182012		
	LAB_ID	1201218-01			1201112-01			1201126-01			1201244-01		
	SAMP_DATE	1/16/2012			1/10/2012			1/11/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	UJ	C
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	A
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-Dup02-01182012			BPS1-TT-MW301D-01172012			BPS1-TT-MW301I-01172012			BPS1-TT-MW301S-01172012		
	LAB_ID	1201244-10			1201218-05			1201218-09			1201218-07		
	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/17/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TTMW-304I2-01182012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	UJ	C	0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		5.5			0.26	J	P	0.5	U		0.5	U	
TOLUENE		0.1	U		0.14	J	P	0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		1.8			2.6			0.5	U		0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW304I1-01182012			BPS1-TTMW-304I2-01182012			BPS1-TT-MW304S-01182012			BPS1-TT-MW305D-01172012		
	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10		
	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	UJ	C	0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		25			5.5			0.5	U		1.9		
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		4.1			1.7			0.5	U		140		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.94	J	P
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW305I-01172012			BPS1-TT-MW305I-01172012RE1			BPS1-TT-MW305S-01172012			BPS1-TT-MW307D-01182012		
	LAB_ID	1201218-08			1201218-08RE1			1201218-06			1201244-04		
	SAMP_DATE	1/17/2012			1/17/2012			1/17/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U					0.5	U		0.5	UJ	C
ETHYLBENZENE		0.25	U					0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U					0.5	U		0.5	U	
M+P-XYLENES		0.5	U					0.5	U		0.5	U	
METHYL ACETATE		0.5	U					0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U					0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U					0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U					0.5	U		0.5	U	
O-XYLENE		0.25	U					0.25	U		0.25	U	
STYRENE		0.1	U					0.1	U		0.1	U	
TETRACHLOROETHENE		3.3						0.5	U		0.5	U	
TOLUENE		0.1	U					0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U					0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U					0.25	U		0.25	U	
TRICHLOROETHENE					3900			0.5	U		0.5	U	
TRICHLOROFLUOROMETHANE		0.91	J	P				0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U					0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW307I-01182012			BPS1-TT-MW307S-01182012			BPS1-TT-MW308D-01162012			BPS1-TT-MW308I-01162012		
	LAB_ID	1201244-07			1201244-09			1201218-02			1201218-03		
	SAMP_DATE	1/18/2012			1/18/2012			1/16/2012			1/16/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	UJ	C	0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U	A	0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		1.1			1.3			0.7	J	P	0.5	U	
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		1.8			0.57	J	P	1.6			0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW308S-01162012			BPS1-TT-MW309D-01112012			BPS1-TT-MW309I-01112012			BPS1-TT-MW309S-01102012		
	LAB_ID	1201218-04			1201126-03			1201126-02			1201112-02		
	SAMP_DATE	1/16/2012			1/11/2012			1/11/2012			1/10/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		1.1			0.5	U		0.5	U	
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.71	J	P	1.8			0.5	U		0.61	J	P
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-Dup01-01172012			BPS1-FB01-01182012			BPS1-FW-MW02-01172012			BPS1-RB01-01182012		
	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03		
	SAMP_DATE	1/17/2012			1/18/2012			1/17/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW305S-01172012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1248		0.08	U		0.08	U		0.3			0.08	U	
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-Dup02-01182012			BPS1-TT-MW301D-01172012			BPS1-TT-MW301I-01172012			BPS1-TT-MW301S-01172012		
	LAB_ID	1201244-10			1201218-05			1201218-09			1201218-07		
	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/17/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TTMW-304I2-01182012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.75	J	U	0.79			0.08	U	
AROCLOR-1248		1.6			0.08	U		0.08	U		10		
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-MW304I1-01182012			BPS1-TTMW-304I2-01182012			BPS1-TT-MW304S-01182012			BPS1-TT-MW305D-01172012		
	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10		
	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.08	U		0.08	U		0.16	J	PU
AROCLOR-1248		0.97			1.5			0.08	U		0.08	U	
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-MW305I-01172012			BPS1-TT-MW305S-01172012			BPS1-TT-MW307D-01182012			BPS1-TT-MW307I-01182012		
	LAB_ID	1201218-08			1201218-06			1201244-04			1201244-07		
	SAMP_DATE	1/17/2012			1/17/2012			1/18/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.08	U		0.56			0.08	U	
AROCLOR-1248		1.3			0.08	U		0.08	U		0.84		
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-MW307S-01182012			BPS1-TT-MW308D-01162012			BPS1-TT-MW308I-01162012			BPS1-TT-MW308S-01162012		
	LAB_ID	1201244-09			1201218-02			1201218-03			1201218-04		
	SAMP_DATE	1/18/2012			1/16/2012			1/16/2012			1/16/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1221		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1232		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1242		0.08	U		0.073	J	P	0.52			0.08	U	
AROCLOR-1248		0.08	U		0.08	U		0.08	U		0.2		
AROCLOR-1254		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1260		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1262		0.08	U		0.08	U		0.08	U		0.08	U	
AROCLOR-1268		0.08	U		0.08	U		0.08	U		0.08	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-MW309D-01112012			BPS1-TT-MW309I-01112012			BPS1-TT-MW309S-01102012		
	LAB_ID	1201126-03			1201126-02			1201112-02		
	SAMP_DATE	1/11/2012			1/11/2012			1/10/2012		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.085	U		0.08	U		0.086	U	
AROCLOR-1221		0.085	U		0.08	U		0.086	U	
AROCLOR-1232		0.085	U		0.08	U		0.086	U	
AROCLOR-1242		0.085	U		0.43			0.086	U	
AROCLOR-1248		0.085	U		0.08	U		1		
AROCLOR-1254		0.085	U		0.08	U		0.086	U	
AROCLOR-1260		0.085	U		0.08	U		0.086	U	
AROCLOR-1262		0.085	U		0.08	U		0.086	U	
AROCLOR-1268		0.085	U		0.08	U		0.086	U	



Tetra Tech

INTERNAL CORRESPONDENCE

TO: R. SOK **DATE:** March 28, 2012
FROM: MEGAN CARSON **COPIES:** DV FILE
SUBJECT: INORGANIC DATA VALIDATION- TOTAL AND FILTERED IRON AND CHROMIUM,
AND HEXAVALENT CHROMIUM
NWIRP BETHPAGE, CTO WE44
SDG 50063-12

SAMPLES: 23/Water/
BPS1-Dup01-01172012 BPS1-FB01-01182012
BPS1-FW-MW02-01172012 BPS1-RB01-01182012
BPS1-TT-Dup02-01182012 BPS1-TT-MW301D-01172012
BPS1-TT-MW301I-01172012 BPS1-TT-MW301S-01172012
BPS1-TT-MW304I1-01182012 BPS1-TT-MW304I2-01182012
BPS1-TT-MW304S-01182012 BPS1-TT-MW305D-01172012
BPS1-TT-MW305I-01172012 BPS1-TT-MW305S-01172012
BPS1-TT-MW307D-01182012 BPS1-TT-MW307I-01182012
BPS1-TT-MW307S-01182012 BPS1-TT-MW308D-01162012
BPS1-TT-MW308I-01162012 BPS1-TT-MW308S-01162012
BPS1-TT-MW309D-01112012 BPS1-TT-MW309I-01112012
BPS1-TT-MW309S-01102012

Overview

The sample set for NWIRP Bethpage, SDG 50063-12, consists of twenty one (21) aqueous samples, one field blank, and one rinsate blank. This SDG contained two field duplicate pairs: BPS1-Dup01-01172012/ BPS1-TT-MW305S-01172012 and BPS1-TT-Dup02-01182012/ BPS1-TT-MW304I2-01182012.

All samples were analyzed for total chromium and iron. Samples BPS1-FB01-01182012, BPS1-RB01-01182012, BPS1-TT-MW309D-01112012-F, and BPS1-TT-MW309S-01102012-F were analyzed for filtered chromium and iron. Samples BPS1-FB01-01182012, BPS1-RB01-01182012, BPS1-TT-Dup02-01182012, BPS1-TT-MW301I-01172012, BPS1-TT-MW304I1-01182012, BPS1-TT-MW304I2-01182012, BPS1-TT-MW305D-01172012, BPS1-TT-MW307I-01182012, BPS1-TT-MW309D-01112012, BPS1-TT-MW309I-01112012, and BPS1-TT-MW309S-01102012 were analyzed for hexavalent chromium. The samples were collected by Tetra Tech on January 10th, 11th, 16th, 17th, and 18th, 2012 and analyzed by Trimatrix Laboratories. Metals analyses were performed using SW-846 Methods 6010C and 6020A. Hexavalent chromium analysis was performed using SW-846 Method 7196.

These data were evaluated based on the following parameters:

- * • Data Completeness
- * • Holding Times
- Initial and Continuing Calibration Verification Results
- * • Laboratory Method / Preparation Blank Analyses
- * • ICP Interference Results
- * • Matrix Spike / Matrix Spike Duplicate Recoveries
- * • Field Duplicate Precision

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- * • Laboratory Duplicate Results
- * • Laboratory Control Standard Results
- * • ICP Serial Dilution Results
- * • Detection Limits
- * • Analyte Quantitation

Metals:

All sample results were within quality control limits.

Hexavalent Chromium:

The CRDL standard analyzed on 1/11/12 had a percent recovery > 150% for hexavalent chromium. Sample BPS1-TT-MW309S-01102012 was affected. The positive result was qualified as estimated (J).

Notes

Positive results greater than the detection limit (DL) but less than the limit of quantitation (LOQ) were qualified as estimated (J).

Sample ID BPS1-TT-MW304I2-01182012 was incorrectly labeled on the Form 1s and the EDD. The ID was changed to match the chain of custody.

The following contaminants were detected in calibration blanks at the following maximum concentrations:

<u>Analyte</u>	<u>Maximum Concentration</u>	<u>Action Level</u>
Hexavalent chromium ⁽¹⁾	0.0005 mg/L	2.5 ug/L
Hexavalent chromium ⁽²⁾	0.0036 mg/L	18 ug/L

(1) Maximum concentration found in a calibration blank affecting samples analyzed on 1/11/12.

(2) Maximum concentration found in a calibration blank affecting samples analyzed on 1/12/12.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No validation action was warranted as sample results were either > action level or non-detected.

The total chromium concentration in sample BPS1-TT-Dup02-01182012 was slightly less than the hexavalent chromium concentration. No action was taken.

Executive Summary


Laboratory Performance: CRDL standard non-compliances resulted in the qualification of sample results. Hexavalent chromium blank contamination did not impact sample results.

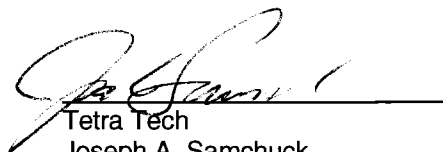
Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the U.S. EPA Region II "Validation of metals for the Contract Laboratory Program based on SOW ILMO5.3 (SOP Revision 13)", September 2006 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

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The text of this report has been formulated to address only those problem areas affecting data quality.


Tetra Tech
Megan Carson
Chemist/Data Validator


Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Region II Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $< CRQL$ for organics) Other problems (can encompass a number of issues; i.e. chromatography, interferences,
Q	=	etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors $> 40\%$ for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids $< 30\%$
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 02230 SDG: 50063-12 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-Dup01-01172012			BPS1-FB01-01182012			BPS1-FW-MW02-01172012			BPS1-RB01-01182012		
	LAB_ID	1201218-12			1201244-02			1201218-11			1201244-03		
	SAMP_DATE	1/17/2012			1/18/2012			1/17/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW305S-01172012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		2.6			0.5	U		8.5			0.5	U	
IRON		650			8.2	J	P	330			29		

PROJ_NO: 02230 SDG: 50063-12 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-TT-Dup02-01182012			BPS1-TT-MW301D-01172012			BPS1-TT-MW301I-01172012			BPS1-TT-MW301S-01172012		
	LAB_ID	1201244-10			1201218-05			1201218-09			1201218-07		
	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/17/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-TT-MW304I2-01182012											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		170			92			7			2.5		
IRON		10	J	P	14	J	P	17	J	P	56		

PROJ_NO: 02230 SDG: 50063-12 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-TT-MW304I1-01182012			BPS1-TT-MW304I2-01182012			BPS1-TT-MW304S-01182012			BPS1-TT-MW305D-01172012		
	LAB_ID	1201244-06			1201244-08			1201244-05			1201218-10		
	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		38			200			1.4			22		
IRON		400			16	J	P	58			1100		

PROJ_NO: 02230 SDG: 50063-12 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-TT-MW305I-01172012			BPS1-TT-MW305S-01172012			BPS1-TT-MW307D-01182012			BPS1-TT-MW307I-01182012		
	LAB_ID	1201218-08			1201218-06			1201244-04			1201244-07		
	SAMP_DATE	1/17/2012			1/17/2012			1/18/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		3.5			2.4			13			12		
IRON		1100			560			460			460		

PROJ_NO: 02230 SDG: 50063-12 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-TT-MW307S-01182012			BPS1-TT-MW308D-01162012			BPS1-TT-MW308I-01162012			BPS1-TT-MW308S-01162012		
	LAB_ID	1201244-09			1201218-02			1201218-03			1201218-04		
	SAMP_DATE	1/18/2012			1/16/2012			1/16/2012			1/16/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		4			17			10			10		
IRON		530			240			240			150		

PROJ_NO: 02230 SDG: 50063-12 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-TT-MW309D-01112012			BPS1-TT-MW309I-01112012			BPS1-TT-MW309S-01102012		
	LAB_ID	1201126-03			1201126-02			1201112-02		
	SAMP_DATE	1/11/2012			1/11/2012			1/10/2012		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		7.5			49			18		
IRON		2400			130			2100		

PROJ_NO: 02230 SDG: 50063-12 FRACTION: MF MEDIA: WATER	NSAMPLE	BPS1-FB01-01182012			BPS1-RB01-01182012			BPS1-TT-MW309D-01112012-F			BPS1-TT-MW309S-01102012-F		
	LAB_ID	1201244-02			1201244-03			1201126-04			1201112-03		
	SAMP_DATE	1/18/2012			1/18/2012			1/11/2012			1/10/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CHROMIUM		0.5	U		0.5	U		0.56	J	P	13		
IRON		10	U		10	U		31			92		

PROJ_NO: 02230 SDG: 50063-12 FRACTION: MISC MEDIA: WATER	NSAMPLE	BPS1-FB01-01182012			BPS1-RB01-01182012			BPS1-TT-Dup02-01182012			BPS1-TT-MW301I-01172012		
	LAB_ID	1201244-02			1201244-03			1201244-10			1201218-09		
	SAMP_DATE	1/18/2012			1/18/2012			1/18/2012			1/17/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF							BPS1-TT-MW304I2-01182012					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		1	U		0.4	J	P	182			5.3		

PROJ_NO: 02230 SDG: 50063-12 FRACTION: MISC MEDIA: WATER	NSAMPLE	BPS1-TT-MW304I1-01182012			BPS1-TT-MW304I2-01182012			BPS1-TT-MW305D-01172012			BPS1-TT-MW307I-01182012		
	LAB_ID	1201244-06			1201244-08			1201218-10			1201244-07		
	SAMP_DATE	1/18/2012			1/18/2012			1/17/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		35.5			181			1	U		1	U	

PROJ_NO: 02230 SDG: 50063-12 FRACTION: MISC MEDIA: WATER	NSAMPLE	BPS1-TT-MW309D-01112012			BPS1-TT-MW309I-01112012			BPS1-TT-MW309S-01102012		
	LAB_ID	1201126-03			1201126-02			1201112-02		
	SAMP_DATE	1/11/2012			1/11/2012			1/10/2012		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		1	U		47.7			8.9	J	C



Tetra Tech INC

INTERNAL CORRESPONDENCE

TO: R. SOK **DATE:** MARCH 28, 2012
FROM: JOSEPH KALINYAK **COPIES:** DV FILE
SUBJECT: ORGANIC DATA VALIDATION – VOC, PCB
NWIRP BETHPAGE, CTO WE44
SAMPLE DELIVERY GROUP SDG 50063-13

SAMPLES: 22 / Aqueous / VOC

BPS1-Dup03-01192012	BPS1-Dup04-01232012	BPS1-FB02-01232012
BPS1-FW-MW01-01192012	BPS1-FW-MW03-01192012	BPS1-HN-MW29I-01192012
BPS1-RB02-01232012	BPS1-TB03-01192012	BPS1-TB04-01202012
BPS1-TB05-01232012	BPS1-TT-MW302D-01202012	BPS1-TT-MW302I1-01202012
BPS1-TT-MW302I2-01202012	BPS1-TT-MW302S-01202012	BPS1-TT-MW303D-01192012
BPS1-TT-MW303I1-01192012	BPS1-TT-MW303I2-01192012	BPS1-TT-MW303S-01232012
BPS1-TT-MW304D-01192012	BPS1-TT-MW306D-01232012	BPS1-TT-MW306I-01232012
BPS1-TT-MW306S-01232012		

19 / Aqueous / PCB

BPS1-Dup03-01192012	BPS1-Dup04-01232012	BPS1-FB02-01232012
BPS1-FW-MW01-01192012	BPS1-FW-MW03-01192012	BPS1-HN-MW29I-01192012
BPS1-RB02-01232012	BPS1-TT-MW302D-01202012	BPS1-TT-MW302I1-01202012
BPS1-TT-MW302I2-01202012	BPS1-TT-MW302S-01202012	BPS1-TT-MW303D-01192012
BPS1-TT-MW303I1-01192012	BPS1-TT-MW303I2-01192012	BPS1-TT-MW303S-01232012
BPS1-TT-MW304D-01192012	BPS1-TT-MW306D-01232012	BPS1-TT-MW306I-01232012
BPS1-TT-MW306S-01232012		

Overview

The sample set for NWIRP Bethpage, CTO WE44, SDG 50063-13 consisted of twenty-two (22) aqueous samples, including one (1) aqueous rinse blank sample, one (1) aqueous field blank sample, and three (3) aqueous trip blank samples. All of the aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. Nineteen (19) of the aqueous samples were analyzed for polychlorinated biphenyls (PCB) as listed above. Two field duplicate sample pairs were included with this sample delivery group (SDG): BPS1-Dup03-01192012 / BPS1-HN-MW29I-01192012 and BPS1-Dup04-01232012 / BPS1-TT-MW303S-01232012.

The samples were collected by Tetra Tech on January 19, 20, and 23, 2012 and analyzed by Trimatrix Laboratories Inc. All analyses were conducted in accordance with EPA Methods SW-846 8260B for VOC and 8082 for PCB, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters:

- * • Data completeness
- * • Hold times
- * • GC/MS System Tuning and Performance
- Initial/continuing Calibrations
- Method Blank Results

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- *
 - Laboratory Control Sample Recovery
 - Matrix Spike/Matrix Spike Duplicate Recoveries
 - Surrogate Spike Recoveries
- *
 - Internal Standard Recoveries
- *
 - Field Duplicate Precision
- *
 - Compound Identification
- *
 - Compound Quantitation
- *
 - Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

VOC

The following VOC contaminant was detected in the method blank at the following maximum concentrations.

<u>Analyte</u>	<u>Maximum Conc. µg/L</u>	<u>Action Level µg/L</u>
Methyl acetate ⁽¹⁾	0.32	1.60

- ⁽¹⁾ Method blank for batch 1201603 affecting samples BPS1-TB03-01192012, BPS1-HN-MW29I-01192012, BPS1-FW-MW01-01192012, BPS1-FW-MW03-01192012, BPS1-TT-MW304D-01192012, BPS1-TT-MW303I2-01192012, BPS1-TT-MW303I1-01192012, BPS1-TT-MW303D-01192012, and BPS1-Dup03-01192012.

An action level of five times the maximum level for methyl acetate has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Acetone was detected in the field blank sample and all three (3) trip blank samples. No validation action was necessary as all samples had non-detected results for methyl acetate. As none of the samples had positive acetone detections, no validation action for field blank and trip blank acetone contamination was necessary.

The initial calibration average relative response factor (RRF) was less than the 0.05 quality control limit for 1,4-dioxane for instrument 224 on 01/17/12 and on all continuing calibration verifications (CCV).

Affected samples: All samples

Action: The non-detected 1,4-dioxane results for all samples were qualified rejected, (UR).

The continuing calibration verification (CCV) %Ds were greater than the 20% quality control limit for bromomethane and dichlorodifluoromethane for instrument 224 on 01/24/12 @ 08:42 affecting the samples listed.

Affected samples:

BPS1-TB03-01192012 BPS1-HN-MW29I-01192012 BPS1-FW-MW01-01192012
BPS1-FW-MW03-01192012 BPS1-TT-MW304D-01192012 BPS1-TT-MW303I2-01192012
BPS1-TT-MW303I1-01192012 BPS1-TT-MW303D-01192012 BPS1-Dup03-01192012

Action: The sample non-detected bromomethane and dichlorodifluoromethane results were qualified estimated, (UJ).

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The CCV %Ds were greater than the 20% quality control limit for cis-1,3-dichloropropene and methyl cyclohexane for instrument 224 on 01/26/11 @ 08:46 affecting the samples listed.

Affected samples:

BPS1-TB04-01202012	BPS1-TB05-01232012	BPS1-RB02-01232012
BPS1-FB02-01232012	BPS1-TT-MW302S-01202012	BPS1-TT-MW302D-01202012
BPS1-TT-MW302I1-01202012	BPS1-TT-MW302I2-01202012	
BPS1-TT-MW306D-01232012	BPS1-TT-MW303S-01232012	
BPS1-TT-MW306I-01232012	BPS1-TT-MW306S-01232012	
BPS1-Dup04-01232012	BPS1-FW-MW01-01192012	
BPS1-FW-MW03-01192012	BPS1-HN-MW29I-01192012	

Action: The non-detected cis-1,3-dichloropropene and methyl cyclohexane results for the samples were qualified estimated, (UJ).

PCB

The matrix spike (MS) and MS duplicate (MSD) percent recoveries (%Rs) were greater than the quality control limit for Aroclor-1016 both columns for spiked sample BPS1-TT-MW306I-01232012.

Action: The non-detected Aroclor-1016 result for the sample BPS1-TT-MW306I-01232012 was qualified estimated, (UJ).

The samples BPS1-TT-MW303D-01192012 (26.9%) and BPS1-TT-MW306D-01232012 (31.1%) had relative percent differences (RPD) between the two analytical column Aroclor-1242 positive results greater than the 25% quality control limit. The sample positive Aroclor-1242 results were qualified estimated, (J).

All method blanks were clean (non-detected for all Aroclors).

Additional Comments

The sample BPS1-FW-MW01-01192012 VOC tetrachloroethene result exceeded the highest calibration standard for the sample undiluted analysis. The sample was re-analyzed at a 2X dilution. Only the tetrachloroethene result was reported from the sample BPS1-FW-MW01-01192012 2X dilution analysis.

The Aroclor surrogate %R was greater than the quality control limit for tetrachloro-m-xylene (TCX) for the DB-XLB column for sample BPS1-FB02-01232012. No validation action was necessary as the sample had non-detected results for all Aroclors and the alternate analytical column was quality control limit compliant.

Samples were diluted for the Aroclor-1248 analysis as listed below.

<u>Sample</u>	<u>Dilution</u>
BPS1-FW-MW03-01192012	2X
BPS1-TT-MW302I2-01202012	2X
BPS1-TT-MW303D-01192012	2X
BPS1-TT-MW303I1-01192012	3X
BPS1-TT-MW302I2-01202012	2X
BPS1-TT-MW304D-01192012	4X
BPS1-TT-MW306I-01232012	2X

The rinse blank sample BPS1-RB02-01232012 had a positive detection for trichloroethene. Trichloroethene was not detected in any of the trip blanks and laboratory method blanks. No validation action was taken by the data reviewer for rinse blank contamination.

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The field blank sample BPS1-FB02-01232012 had positive detections for acetone, bromoform, chlorodibromomethane, and toluene. Detections of trihalomethanes are indicative of potable water. Analytes detected in the field blank were not used to establish blank action levels. No blank actions were taken.

Sample VOC and Aroclor analyte results were reported to the Limit of Detection (LOD).

Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

The DB-35 column (column 1) results were reported by the laboratory for the positive Aroclor results. The laboratory did not provide Aroclor %Ds for all of the CCVs. The data validation chemist manually calculated the CCV %Ds to verify that they were quality control compliant.

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC sample analyte results were qualified for initial calibration RRF and CCV %D quality control limit non-compliances.

Other Factors Affecting Data Quality: Positive results below the Limit of Quantitation (LOQ) and above the Method Detection Limit (MDL) were qualified as estimated, (J), due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to the SOP HW-24 Revision #2 - August 2008 Validating Volatile Organic Compounds by SW-846 Method 8260B, SOP HW-45 Revision 1 - October 2006 Data Validation SOP of Organic Analysis of PCBs by Gas Chromatography, and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (April 2009).



Tetra Tech

Joseph Kalinyak
Chemist/Data Validator



Tetra Tech

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

- Appendix A - Qualified Analytical Results
- Appendix B - Results as Reported by the Laboratory
- Appendix C - Region II Data Validation Forms
- Appendix D - Support Documentation

Appendix A

Qualified Analytical Results

Value Qualifier Key (Val Qual)

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The result is an estimated non-detected quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U - Value is a non-detect as reported by the laboratory.

UR – Non-detected result is considered rejected, (UR), as a result of technical non-compliances.

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $< CRQL$ for organics)
Q	=	Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors $> 40\%$ for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids $< 30\%$
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-Dup03-01192012			BPS1-Dup04-01232012			BPS1-FB02-01232012			BPS1-FW-MW01-01192012		
	LAB_ID	1201254-09			1201310-09			1201310-08			1201254-03		
	SAMP_DATE	1/19/2012			1/23/2012			1/23/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-HN-MW29I-01192012			BPS1-TT-MW303S-01232012								
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		8.3		
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		1.2		
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		3.1		
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		16			1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		4.4			0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	U		0.5	U		0.5	U	
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		3.1			0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		70		
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	UJ	C	0.1	UJ	C	0.1	UJ	C
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-FW-MW03-01192012			BPS1-HN-MW29I-01192012			BPS1-RB02-01232012			BPS1-TB03-01192012		
	LAB_ID	1201254-04			1201254-02			1201310-06			1201254-01		
	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.25	J	P	0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		3	J	P
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	U		0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.49	J	P	0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	UJ	C	0.1	UJ	C	0.1	UJ	C	0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TB04-01202012			BPS1-TB05-01232012			BPS1-TT-MW302D-01202012			BPS1-TT-MW302I1-01202012		
	LAB_ID	1201287-01			1201310-01			1201287-03			1201287-04		
	SAMP_DATE	1/20/2012			1/23/2012			1/20/2012			1/20/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.23	J	P	0.35	J	P
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.45	J	P
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.62	J	P	0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1.4	J	P	2.8	J	P	1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	UJ	C	0.1	UJ	C	0.1	UJ	C	0.1	UJ	C
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW302I2-01202012			BPS1-TT-MW302S-01202012			BPS1-TT-MW303D-01192012			BPS1-TT-MW303I1-01192012		
	LAB_ID	1201287-05			1201287-02			1201254-08			1201254-07		
	SAMP_DATE	1/20/2012			1/20/2012			1/19/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		1.6		
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		1.6		
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	U		0.5	U		0.5	UJ	C	0.5	UJ	C
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		2		
CIS-1,3-DICHLOROPROPENE		0.1	UJ	C	0.1	UJ	C	0.1	U		0.1	U	
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW303I2-01192012			BPS1-TT-MW303S-01232012			BPS1-TT-MW304D-01192012			BPS1-TT-MW306D-01232012		
	LAB_ID	1201254-06			1201310-03			1201254-05			1201310-02		
	SAMP_DATE	1/19/2012			1/23/2012			1/19/2012			1/23/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C	25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETONE		1	U		1	U		1	U		1	U	
BENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U		0.25	U		0.25	U	
BROMOMETHANE		0.5	UJ	C	0.5	U		0.5	UJ	C	0.5	U	
CARBON DISULFIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	U		0.1	UJ	C	0.1	U		0.1	UJ	C
CYCLOHEXANE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW306I-01232012			BPS1-TT-MW306S-01232012		
	LAB_ID	1201310-04			1201310-07		
	SAMP_DATE	1/23/2012			1/23/2012		
	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.5	U		0.5	U	
1,1,2,2-TETRACHLOROETHANE		0.5	U		0.5	U	
1,1,2-TRICHLOROETHANE		0.5	U		0.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.5	U		0.5	U	
1,1-DICHLOROETHANE		0.5	U		0.5	U	
1,1-DICHLOROETHENE		0.5	U		0.5	U	
1,2,3-TRICHLOROBENZENE		0.5	U		0.5	U	
1,2,4-TRICHLOROBENZENE		0.5	U		0.5	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.5	U		0.5	U	
1,2-DIBROMOETHANE		0.25	U		0.25	U	
1,2-DICHLOROBENZENE		0.5	U		0.5	U	
1,2-DICHLOROETHANE		0.5	U		0.5	U	
1,2-DICHLOROPROPANE		0.5	U		0.5	U	
1,3-DICHLOROBENZENE		0.25	U		0.25	U	
1,4-DICHLOROBENZENE		0.5	U		0.5	U	
1,4-DIOXANE		25	UR	C	25	UR	C
2-BUTANONE		0.5	U		0.5	U	
2-HEXANONE		0.5	U		0.5	U	
4-METHYL-2-PENTANONE		0.5	U		0.5	U	
ACETONE		1	U		1	U	
BENZENE		0.5	U		0.5	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.5	U		0.5	U	
BROMOFORM		0.25	U		0.25	U	
BROMOMETHANE		0.5	U		0.5	U	
CARBON DISULFIDE		0.5	U		0.5	U	
CARBON TETRACHLORIDE		0.5	U		0.5	U	
CHLOROBENZENE		0.5	U		0.5	U	
CHLORODIBROMOMETHANE		0.25	U		0.25	U	
CHLOROETHANE		0.5	U		0.5	U	
CHLOROFORM		0.5	U		0.5	U	
CHLOROMETHANE		0.5	U		0.5	U	
CIS-1,2-DICHLOROETHENE		0.5	U		0.5	U	
CIS-1,3-DICHLOROPROPENE		0.1	UJ	C	0.1	UJ	C
CYCLOHEXANE		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-Dup03-01192012			BPS1-Dup04-01232012			BPS1-FB02-01232012			BPS1-FW-MW01-01192012		
	LAB_ID	1201254-09			1201310-09			1201310-08			1201254-03		
	SAMP_DATE	1/19/2012			1/23/2012			1/23/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-HN-MW29I-01192012			BPS1-TT-MW303S-01232012								
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	UJ	C	0.5	U		0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.46	J	P	1.8			0.5	U		200		
TOLUENE		0.1	U		0.1	U		0.51	J	P	0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	J	P
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.5	U		2.7			0.5	U		21		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-FW-MW03-01192012			BPS1-HN-MW29I-01192012			BPS1-RB02-01232012			BPS1-TB03-01192012		
	LAB_ID	1201254-04			1201254-02			1201310-06			1201254-01		
	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	UJ	C	0.5	UJ	C	0.5	U		0.5	UJ	C
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		68			0.49	J	P	0.5	U		0.5	U	
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		3.7			0.5	U		6.5			0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TB04-01202012			BPS1-TB05-01232012			BPS1-TT-MW302D-01202012			BPS1-TT-MW302I1-01202012		
	LAB_ID	1201287-01			1201310-01			1201287-03			1201287-04		
	SAMP_DATE	1/20/2012			1/23/2012			1/20/2012			1/20/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.5	U		0.33	J	P	0.29	J	P
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		0.5	U		0.5	U		3.9			1.7		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW302I2-01202012			BPS1-TT-MW302S-01202012			BPS1-TT-MW303D-01192012			BPS1-TT-MW303I1-01192012		
	LAB_ID	1201287-05			1201287-02			1201254-08			1201254-07		
	SAMP_DATE	1/20/2012			1/20/2012			1/19/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U		0.5	UJ	C	0.5	UJ	C
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	UJ	C	0.5	UJ	C	0.5	U		0.5	U	
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.5	U		0.5	U		83		
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		1.8			0.5	U		0.51	J	P	18		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW303I2-01192012			BPS1-TT-MW303S-01232012			BPS1-TT-MW304D-01192012			BPS1-TT-MW306D-01232012		
	LAB_ID	1201254-06			1201310-03			1201254-05			1201310-02		
	SAMP_DATE	1/19/2012			1/23/2012			1/19/2012			1/23/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	UJ	C	0.5	U		0.5	UJ	C	0.5	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	U		0.5	UJ	C	0.5	U		0.5	UJ	C
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TETRACHLOROETHENE		0.94	J	P	1.9			0.5	U		0.44	J	P
TOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U		0.25	U		0.25	U	
TRICHLOROETHENE		1.6			2.7			0.5	U		2.4		
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: OV MEDIA: WATER	NSAMPLE	BPS1-TT-MW306I-01232012			BPS1-TT-MW306S-01232012		
	LAB_ID	1201310-04			1201310-07		
	SAMP_DATE	1/23/2012			1/23/2012		
	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
DICHLORODIFLUOROMETHANE		0.5	U		0.5	U	
ETHYLBENZENE		0.25	U		0.25	U	
ISOPROPYLBENZENE		0.5	U		0.5	U	
M+P-XYLENES		0.5	U		0.5	U	
METHYL ACETATE		0.5	U		0.5	U	
METHYL CYCLOHEXANE		0.5	UJ	C	0.5	UJ	C
METHYL TERT-BUTYL ETHER		0.5	U		0.5	U	
METHYLENE CHLORIDE		0.5	U		0.5	U	
O-XYLENE		0.25	U		0.25	U	
STYRENE		0.1	U		0.1	U	
TETRACHLOROETHENE		0.5	U		0.4	J	P
TOLUENE		0.1	U		0.1	U	
TRANS-1,2-DICHLOROETHENE		0.5	U		0.5	U	
TRANS-1,3-DICHLOROPROPENE		0.25	U		0.25	U	
TRICHLOROETHENE		0.54	J	P	0.5	U	
TRICHLOROFLUOROMETHANE		0.5	U		0.5	U	
VINYL CHLORIDE		0.5	U		0.5	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-Dup03-01192012			BPS1-Dup03-01192012RE1			BPS1-Dup04-01232012			BPS1-Dup04-01232012RE1		
	LAB_ID	1201254-09			1201254-09RE1			1201310-09			1201310-09RE1		
	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/23/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-HN-MW29I-01192012			BPS1-HN-MW29I-01192012			BPS1-TT-MW303S-01232012			BPS1-TT-MW303S-01232012		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					0.66						0.2		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230 SDG: 50063-13 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-FB02-01232012			BPS1-FW-MW01-01192012			BPS1-FW-MW01-01192012RE1			BPS1-FW-MW03-01192012		
	LAB_ID	1201310-08			1201254-03			1201254-03RE1			1201254-04		
	SAMP_DATE	1/23/2012			1/19/2012			1/19/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U		0.08	U					0.08	U	
AROCLOR-1221		0.08	U		0.08	U					0.08	U	
AROCLOR-1232		0.08	U		0.08	U					0.08	U	
AROCLOR-1242		0.08	U		0.08	U					0.08	U	
AROCLOR-1248		0.08	U					0.46					
AROCLOR-1254		0.08	U		0.08	U					0.08	U	
AROCLOR-1260		0.08	U		0.08	U					0.08	U	
AROCLOR-1262		0.08	U		0.08	U					0.08	U	
AROCLOR-1268		0.08	U		0.08	U					0.08	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-FW-MW03-01192012RE1			BPS1-HN-MW29I-01192012			BPS1-HN-MW29I-01192012RE1			BPS1-RB02-01232012		
	LAB_ID	1201254-04RE1			1201254-02			1201254-02RE1			1201310-06		
	SAMP_DATE	1/19/2012			1/19/2012			1/19/2012			1/23/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016					0.08	U					0.094	U	
AROCLOR-1221					0.08	U					0.094	U	
AROCLOR-1232					0.08	U					0.094	U	
AROCLOR-1242					0.08	U					0.094	U	
AROCLOR-1248		1.9						0.63			0.094	U	
AROCLOR-1254					0.08	U					0.094	U	
AROCLOR-1260					0.08	U					0.094	U	
AROCLOR-1262					0.08	U					0.094	U	
AROCLOR-1268					0.08	U					0.094	U	

PROJ_NO: 02230 SDG: 50063-13 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-MW302D-01202012			BPS1-TT-MW302D-01202012RE1			BPS1-TT-MW302I1-01202012			BPS1-TT-MW302I1-01202012RE1		
	LAB_ID	1201287-03			1201287-03RE1			1201287-04			1201287-04RE1		
	SAMP_DATE	1/20/2012			1/20/2012			1/20/2012			1/20/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					0.85						1.2		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230 SDG: 50063-13 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-MW302I2-01202012			BPS1-TT-MW302I2-01202012RE1			BPS1-TT-MW302S-01202012			BPS1-TT-MW302S-01202012RE1		
	LAB_ID	1201287-05			1201287-05RE1			1201287-02			1201287-02RE1		
	SAMP_DATE	1/20/2012			1/20/2012			1/20/2012			1/20/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					1.9						0.43		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230 SDG: 50063-13 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-MW303D-01192012			BPS1-TT-MW303D-01192012RE1			BPS1-TT-MW303I1-01192012			BPS1-TT-MW303I1-01192012RE1		
	LAB_ID	1201254-08			1201254-08RE1			1201254-07			1201254-07RE1		
	SAMP_DATE	1/19/2012			1/19/2012			1/19/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.085	U					0.08	U				
AROCLOR-1221		0.085	U					0.08	U				
AROCLOR-1232		0.085	U					0.08	U				
AROCLOR-1242					1.6	J	U				3.9		
AROCLOR-1248		0.085	U					0.08	U				
AROCLOR-1254		0.085	U					0.08	U				
AROCLOR-1260		0.085	U					0.08	U				
AROCLOR-1262		0.085	U					0.08	U				
AROCLOR-1268		0.085	U					0.08	U				

PROJ_NO: 02230 SDG: 50063-13 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-MW303I2-01192012			BPS1-TT-MW303I2-01192012RE1			BPS1-TT-MW303S-01232012			BPS1-TT-MW303S-01232012RE1		
	LAB_ID	1201254-06			1201254-06RE1			1201310-03			1201310-03RE1		
	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/23/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					2.4						0.21		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230 SDG: 50063-13 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-MW304D-01192012			BPS1-TT-MW304D-01192012RE1			BPS1-TT-MW306D-01232012			BPS1-TT-MW306D-01232012RE1		
	LAB_ID	1201254-05			1201254-05RE1			1201310-02			1201310-02RE1		
	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/23/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	U					0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U								0.61	J	U
AROCLOR-1248					4.2			0.08	U				
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				

PROJ_NO: 02230 SDG: 50063-13 FRACTION: PCB MEDIA: WATER	NSAMPLE	BPS1-TT-MW306I-01232012			BPS1-TT-MW306I-01232012RE1			BPS1-TT-MW306S-01232012			BPS1-TT-MW306S-01232012RE1		
	LAB_ID	1201310-04			1201310-04RE1			1201310-07			1201310-07RE1		
	SAMP_DATE	1/23/2012			1/23/2012			1/23/2012			1/23/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		0.08	UJ	D				0.08	U				
AROCLOR-1221		0.08	U					0.08	U				
AROCLOR-1232		0.08	U					0.08	U				
AROCLOR-1242		0.08	U					0.08	U				
AROCLOR-1248					1.8						0.54		
AROCLOR-1254		0.08	U					0.08	U				
AROCLOR-1260		0.08	U					0.08	U				
AROCLOR-1262		0.08	U					0.08	U				
AROCLOR-1268		0.08	U					0.08	U				



Tetra Tech

INTERNAL CORRESPONDENCE

TO: R. SOK **DATE:** March 28, 2012
FROM: MEGAN CARSON **COPIES:** DV FILE
SUBJECT: INORGANIC DATA VALIDATION- TOTAL CALCIUM, CHROMIUM, IRON, AND SODIUM, AND FILTERED CHROMIUM AND IRON, TOC, AND HEXAVALENT CHROMIUM
NWIRP BETHPAGE, CTO WE44
SDG 50063-13

SAMPLES: 20/Water/
BPS1-Dup03-01192012 BPS1-Dup04-01232012
BPS1-FB02-01232012 BPS1-FW-MW01-01192012
BPS1-FW-MW03-01192012 BPS1-HN-MW29I-01192012
BPS1-RB02-01232012 BPS1-TT-MW301D-01232012
BPS1-TT-MW302D-01202012 BPS1-TT-MW302I1-01202012
BPS1-TT-MW302I2-01202012 BPS1-TT-MW302S-01202012
BPS1-TT-MW303D-01192012 BPS1-TT-MW303I1-01192012
BPS1-TT-MW303I2-01192012 BPS1-TT-MW303S-01232012
BPS1-TT-MW304D-01192012 BPS1-TT-MW306D-01232012
BPS1-TT-MW306I-01232012 BPS1-TT-MW306S-01232012

Overview

The sample set for NWIRP Bethpage, SDG 50063-13, consists of eighteen (18) aqueous samples, one field blank, and one rinsate blank. This SDG contained two field duplicate pairs: BPS1-Dup03-01192012/BPS1-HN-MW29I-01192012 and BPS1-Dup04-01232012/BPS1-TT-MW303S-01232012.

All samples (except BPS1-TT-MW301D-01232012) were analyzed for total chromium and iron. Samples BPS1-HN-MW29I-01192012 and BPS1-TT-MW302D-01202012 were analyzed for total calcium and sodium. Sample BPS1-TT-MW303I1-01192012 was analyzed for filtered chromium and iron. Samples BPS1-FB02-01232012, BPS1-RB02-01232012, BPS1-TT-MW301D-01232012, BPS1-TT-MW303I2-01192012, BPS1-TT-MW306I-01232012, and BPS1-TT-MW306S-01232012 were analyzed for hexavalent chromium. Samples BPS1-TT-MW306D-01232012, BPS1-TT-MW306I-01232012, and BPS1-TT-MW306S-01232012 were analyzed for total organic carbon (TOC). The samples were collected by Tetra Tech on January 19th, 20th, 23rd, 2012 and analyzed by Trimatrix Laboratories. Iron, calcium, and sodium analyses were conducted using method 6010C. Chromium analyses were conducted using method 6020A. TOC analyses were conducted using standard method 5310C. Hexavalent chromium analyses were conducted using method 7196A.

These data were evaluated based on the following parameters:

- * • Data Completeness
- * • Holding Times
- * • Initial and Continuing Calibration Verification Results
- * • Laboratory Method / Preparation Blank Analyses
- * • ICP Interference Results
- * • Matrix Spike / Matrix Spike Duplicate Recoveries
- Field Duplicate Precision

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- * • Laboratory Duplicate Results
- * • Laboratory Control Standard Results
- * • ICP Serial Dilution Results
- * • Detection Limits
- * • Analyte Quantitation

Metals:

Field duplicate pair BPS1-Dup04-01232012/BPS1-TT-MW303S-01232012 had a difference > 4X LOQ for iron. The iron results for the sample pair were qualified as estimated (J). No further validation action was warranted as the other field duplicate pair in the SDG was within quality control limits.

Hexavalent Chromium:

All sample results were within quality control limits.

Notes

Positive results greater than the detection limit (DL) but less than the limit of quantitation (LOQ) were qualified as estimated (J).

The matrix spike and matrix spike duplicate of sample BPS1-TT-MW306I-01232012 for hexavalent chromium for batch 1201753 had a relative percent difference (RPD) > 20%. The percent recoveries for the matrix spike and matrix spike duplicate were within quality control limits. No validation action was warranted based on the RPD non-compliances alone.

The field duplicate sample BPS1-Dup03-01192012 was not analyzed for calcium and sodium because it was not marked for analysis on the chain of custody record. The original sample BPS1-HN-MW29I-01192012 was analyzed for calcium and sodium. No action was taken but this item is noted because a comparison of the results for field duplicate precision could not be conducted.

Executive Summary

Laboratory Performance: None.

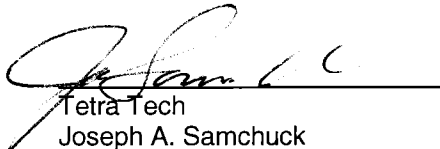
Other Factors Affecting Data Quality: Field duplicate imprecision was noted for iron in the sample pair BPS1-Dup04-01232012/BPS1-TT-MW303S-01232012. Iron results in the affected pair were qualified as estimated.

The data for these analyses were reviewed with reference to the U.S. EPA Region II "Validation of metals for the Contract Laboratory Program based on SOW ILMO5.3 (SOP Revision 13)", September 2006 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories", April 2009.

The text of this report has been formulated to address only those problem areas affecting data quality.


Tetra Tech
Megan Carson
Chemist/Data Validator

To: R. Sok
Page 3 of 3
3/28/2012



Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer
Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C – Region II Worksheets
4. Appendix D - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $< CRQL$ for organics) Other problems (can encompass a number of issues; i.e. chromatography, interferences,
Q	=	etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors $> 40\%$ for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids $< 30\%$
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 02230 SDG: 50063-13 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-Dup03-01192012			BPS1-Dup04-01232012			BPS1-FB02-01232012			BPS1-FW-MW01-01192012		
	LAB_ID	1201254-09			1201310-09			1201310-08			1201254-03		
	SAMP_DATE	1/19/2012			1/23/2012			1/23/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	BPS1-HN-MW29I-01192012			BPS1-TT-MW303S-01232012								
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM													
CHROMIUM		5.2			4.2			0.79	J	P	4.4		
IRON		93			210	J	G	320			860		
SODIUM													

PROJ_NO: 02230 SDG: 50063-13 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-FW-MW03-01192012			BPS1-HN-MW29I-01192012			BPS1-RB02-01232012			BPS1-TT-MW302D-01202012		
	LAB_ID	1201254-04			1201254-02			1201310-06			1201287-03		
	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/20/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM					24000						8000		
CHROMIUM		4.6			5.5			0.5	U		2.3		
IRON		110			83			12	J	P	75		
SODIUM					7800						24000		

PROJ_NO: 02230 SDG: 50063-13 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-TT-MW302I1-01202012			BPS1-TT-MW302I2-01202012			BPS1-TT-MW302S-01202012			BPS1-TT-MW303D-01192012		
	LAB_ID	1201287-04			1201287-05			1201287-02			1201254-08		
	SAMP_DATE	1/20/2012			1/20/2012			1/20/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM													
CHROMIUM		1.4			5.1			0.63	J	P	5.3		
IRON		34			59			22			520		
SODIUM													

PROJ_NO: 02230 SDG: 50063-13 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-TT-MW303I1-01192012			BPS1-TT-MW303I2-01192012			BPS1-TT-MW303S-01232012			BPS1-TT-MW304D-01192012		
	LAB_ID	1201254-07			1201254-06			1201310-03			1201254-05		
	SAMP_DATE	1/19/2012			1/19/2012			1/23/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM													
CHROMIUM		5.8			2.4			2.7			4.5		
IRON		6000			69			66 J	G		160		
SODIUM													

PROJ_NO: 02230 SDG: 50063-13 FRACTION: M MEDIA: WATER	NSAMPLE	BPS1-TT-MW306D-01232012			BPS1-TT-MW306I-01232012			BPS1-TT-MW306S-01232012		
	LAB_ID	1201310-02			1201310-04			1201310-07		
	SAMP_DATE	1/23/2012			1/23/2012			1/23/2012		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM										
CHROMIUM		1.2			2.3			1.3		
IRON		77			93			310		
SODIUM										

PROJ_NO: 02230 SDG: 50063-13 FRACTION: MF MEDIA: WATER	NSAMPLE	BPS1-TT-MW303I1-01192012		
	LAB_ID	1201254-07		
	SAMP_DATE	1/19/2012		
	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
CHROMIUM		0.23	J	P
IRON		70		

PROJ_NO: 02230 SDG: 50063-13 FRACTION: MISC MEDIA: WATER	NSAMPLE	BPS1-FB02-01232012			BPS1-RB02-01232012			BPS1-TT-MW301D-01232012			BPS1-TT-MW303I2-01192012		
	LAB_ID	1201310-08			1201310-06			1201310-05			1201254-06		
	SAMP_DATE	1/23/2012			1/23/2012			1/23/2012			1/19/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.5	J	P	1	U		86			1	U	
TOTAL ORGANIC CARBON													

PROJ_NO: 02230 SDG: 50063-13 FRACTION: MISC MEDIA: WATER	NSAMPLE	BPS1-TT-MW306D-01232012			BPS1-TT-MW306I-01232012			BPS1-TT-MW306S-01232012		
	LAB_ID	1201310-02			1201310-04			1201310-07		
	SAMP_DATE	1/23/2012			1/23/2012			1/23/2012		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM					1	U		1	U	
TOTAL ORGANIC CARBON		1100			3300			710	J	P

Appendix E
SAP Addendum

**SAMPLING AND ANALYSIS PLAN ADDENDUM
ADDITIONAL GROUNDWATER INVESTIGATION
SITE 1 – FORMER DRUM MARSHALLING AREA
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP) BETHPAGE
BETHPAGE, NEW YORK**

INTRODUCTION

This Work Plan Addendum has been prepared for the Mid-Atlantic Division of the Naval Facilities Engineering Command (NAVFAC) under Contract Task Order (CTO) WE44 issued by the Mid-Atlantic Division of NAVFAC under the Comprehensive Long-Term Environmental Action Navy (CLEAN) III contract number N62470-08-D-1001. This document is an addendum to the May 2010 Sampling and Analysis Plan (SAP) PCB Investigation (herein referenced as the SAP) and the July 2011 Interim Data Summary Report at Site 1 – Former Drum Marshalling Area. This SAP addendum addresses the installation of additional monitoring wells to further investigate potential upgradient sources and the extent of PCB- and hexavalent chromium-contaminated groundwater north of Site 1.

SCOPE AND OBJECTIVE

A total of eight monitoring wells will be installed at five locations during this additional groundwater investigation. Shallow water table monitoring wells will be installed at each location and three of the five well locations will include an intermediate monitoring well (approximately 180 feet bgs.) as presented on Figure 1. Split spoon samples and gamma logging will be used to interpret lithology at each of the proposed monitoring well locations and determine actual well screen intervals. The objective is to further investigate and evaluate PCB- and hexavalent chromium-contaminated groundwater north of Site 1, the former NWIRP recharge basins, and former sludge drying beds and also assess potential upgradient sources (i.e., former Grumman recharge basins as depicted on Figure 1). After well installation, groundwater samples will be collected from the new and existing monitoring wells and analyzed for volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), total chromium, and hexavalent chromium to further evaluate impacts to groundwater. Groundwater investigative activities will be conducted in accordance with the procedures outlined in the SAP. Results from these additional investigative activities will be evaluated and presented in a data summary report to support future remedy evaluations and determine whether Site 1 is a statistically significant source of PCBs detected in groundwater.

SOIL BORINGS

Soil borings will be advanced via hollow stem auger (HSA) drilling methods at each monitoring well location/cluster. Each soil boring will be advanced to a depth of approximately 70 feet below ground surface (bgs) at each shallow well location and to approximately 200 feet at each intermediate well location. Lithology will be obtained at each soil boring via split spoons at select intervals and gamma logging from the total depth to the ground surface. The split spoon samples and gamma logs will be used to determine the actual screened intervals for monitoring well installation at each location.

MONITORING WELL INSTALLATION

Eight monitoring wells will be installed via HSA drilling methods at the locations presented on Figure 1. Five monitoring wells will be installed along Aerospace Boulevard on former Navy property (BPS1-TT-MW310S, -MW311S, -MW311I, -MW312S, and -MW312I). Pending a Navy access agreement, one shallow monitoring well will be installed northeast of the recharge basins (BPS1-TT-MW313S). Two monitoring wells, shallow and intermediate, will be installed approximately 100 feet east of the southeastern recharge basin (BPS1-TT-MW314S and -MW314I). The monitoring wells will be used to further define the extent of upgradient PCB- and hexavalent chromium-contaminated groundwater and also help determine whether other upgradient sources may be contributing to contamination detected upgradient of Site 1. Table 1 provides a summary of estimated screened intervals for the monitoring well installation. Each monitoring well will be developed prior to groundwater sampling.

Soil cuttings and/or fluids generated from the soil boring and monitoring well installations will be field screened for evidence of contamination (visual staining or elevated photoionization detector [PID] readings >10 parts per million [ppm]). If contamination is suspected, those soils will be segregated and characterized for disposal. All soil cuttings will be containerized in 55-gallon drums or roll off containers, sampled, and managed as Investigation Derived Waste (IDW).

GROUNDWATER SAMPLING

Groundwater samples will be collected from each new and existing monitoring well and sampled for VOCs, PCBs, total chromium, and hexavalent chromium as presented in Table 1. Three additional monitoring wells (BPS4-AOC22-MW05, -MW06, and -MW10) from AOC22/Site 4 will be included in this sampling event to help characterize the shallow groundwater west of the

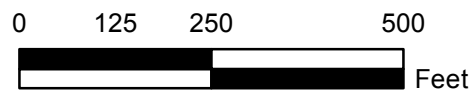
existing downgradient monitoring wells. A submersible pump (e.g. Grundfos) will be utilized for groundwater sampling and low flow procedures will be followed as outlined in the SAP. Wellhead parameters including pH, temperature, specific conductivity, oxygen reduction potential, turbidity, and dissolved oxygen will be collected during sampling and allowed to stabilize prior to sample collection. Based on the good correlation between field test kits and laboratory confirmatory samples for hexavalent chromium, field test kits will be utilized along with laboratory confirmation samples for hexavalent chromium during this sampling event.

All fluids generated during decontamination procedures and purge water obtained during well installation, development, and sampling will be containerized in a poly tank or Frac tank, sampled, and be managed as IDW.



Legend

- Monitoring Well Proposed
- Existing Monitoring Well



**Proposed Monitoring Well Location Map
Site 1-Former Drum Marshalling Area
NWIRP Bethpage
Bethpage, New York**

FILE	112G02230	SCALE AS NOTED
FIGURE NO.	FIGURE 1	DATE 8/27/12

TABLE 1
SAP ADDENDUM MONITORING WELL INSTALLATION AND SAMPLING
SITE 1 - FORMER DRUM MARSHALLING AREA
NWIRP BETHPAGE, NEW YORK

Activity	Sample Point ID	Screened Interval (feet bgs)	Sample Analysis	Activity Details
Monitoring Well Sampling	TTAOC22-MW05	47-67	TCL VOCs, PCBs, Total Chromium Hexavalent Chromium	AOC22/Site 4 Wells added to sampling
	TTAOC22-MW06	52-62		AOC22/Site 4 Wells added to sampling
	TTAOC22-MW10	49-59		AOC22/Site 4 Wells added to sampling
	BPS1-FW-MW01	48.5-63.5 ¹		Site 1 monitoring well network
	BPS1-FW-MW02	49-64 ¹		Site 1 monitoring well network
	BPS1-FW-MW03	52-67 ¹		Site 1 monitoring well network
	BPS1-HN-MW29I	120-130 ²		Site 1 monitoring well network
	BPS1-TT-MW301S	51-61		Site 1 monitoring well network
	BPS1-TT-MW301I	130-140		Site 1 monitoring well network
	BPS1-TT-MW301D	210-220		Site 1 monitoring well network
	BPS1-TT-MW302S	41-51		Site 1 monitoring well network
	BPS1-TT-MW302I1	110-120		Site 1 monitoring well network
	BPS1-TT-MW302I2	140-150		Site 1 monitoring well network
	BPS1-TT-MW302D	203-213		Site 1 monitoring well network
	BPS1-TT-MW303S	46-56		Site 1 monitoring well network
	BPS1-TT-MW303I1	95-105		Site 1 monitoring well network
	BPS1-TT-MW303I2	146-156		Site 1 monitoring well network
	BPS1-TT-MW303D	208-218		Site 1 monitoring well network
	BPS1-TT-MW304S	43-53		Site 1 monitoring well network
	BPS1-TT-MW304I1	102-112		Site 1 monitoring well network
	BPS1-TT-MW304I2	140-150		Site 1 monitoring well network
	BPS1-TT-MW304D	180-190		Site 1 monitoring well network
	BPS1-TT-MW305S	40-50		Site 1 monitoring well network
	BPS1-TT-MW305I	190-200		Site 1 monitoring well network
	BPS1-TT-MW305D	286-296		Site 1 monitoring well network
	BPS1-TT-MW306S	50-60		Site 1 monitoring well network
	BPS1-TT-MW306I	189-199		Site 1 monitoring well network
	BPS1-TT-MW306D	284-294		Site 1 monitoring well network
	BPS1-TT-MW307S	40.5-50.5		Site 1 monitoring well network
	BPS1-TT-MW307I	188-198		Site 1 monitoring well network
	BPS1-TT-MW307D	276-286		Site 1 monitoring well network
	BPS1-TT-MW308S	54-64		Site 1 monitoring well network
	BPS1-TT-MW308I	156-166		Site 1 monitoring well network
	BPS1-TT-MW308D	250-260		Site 1 monitoring well network
	BPS1-TT-MW309S	53-63		Site 1 monitoring well network
	BPS1-TT-MW309I	160-170		Site 1 monitoring well network
	BPS1-TT-MW309D	252-262		Site 1 monitoring well network
Proposed Monitoring Well Installation and Sampling	BPS1-TT-MW310S	60-70 ¹	TCL VOCs, PCBs, Total Chromium Hexavalent Chromium	Shallow well to be screened across water table.
	BPS1-TT-MW311S	60-70 ¹		Shallow well to be screened across water table.
	BPS1-TT-MW311D	160-170 ¹		Intermediate well to be screened based on lithology.
	BPS1-TT-MW312S	60-70 ¹		Shallow well to be screened across water table.
	BPS1-TT-MW312I	160-170 ¹		Intermediate well to be screened based on lithology.
	BPS1-TT-MW313S	60-70 ¹		Shallow well to be screened across water table.
	BPS1-TT-MW314S	60-70 ¹		Shallow well to be screened across water table.
	BPS1-TT-MW314I	160-170 ¹		Intermediate well to be screened based on lithology.

Notes:

MW - Monitoring Well

NA - Not Applicable

TCL VOCs - Target Compound List Volatile Organic Compounds

PCBs - Polychlorinated Biphenyls

bgs - below ground surface

¹ - Estimated screen intervals, actual depths to be determined based on lithology

Quality Control/Quality Assurance samples will consist of the following:

- 10% Duplicate
- 5% MS/MSD
- Field Blank
- Rinsate Blank